

CONSULTING ENGINEERS

Sieve Joseph Records Confer Industria Plance 0001

PRE-DESIGN INVESTIGATION SITE MONITORING PLAN INTERIM FINAL REPORT

SDMS DocID 9DH5# 230835

INDUSTRI-PLEX SITE WOBURN, MASSACHUSETTS

ISRT-PDI-33

Volume 1 of 2

Prepared for:

Industri-Plex Site Remedial Trust 36 Commerce Way Woburn, Massachusetts

DISTRIBUTION:

8 Copies - Industri-Plex Site Remedial Trust

7 Copies - U.S. Environmental Protection Agency

1 Copy - Massachusetts Dept. of Environmental Protection
1 Copy - NUS Corporation

2 Copies - Golder Associates Inc.

April 1991 REVISED 9/91

Project No.: 893-6255



CONSULTING ENGINEERS

April 26, 1991

Project No. 893-6255

United States Environmental Protection Agency, Region I J.F.K. Federal Building, HRS-CAN-3 Boston, Massachusetts 02203-2211

Attn: Joseph DeCola

Remedial Project Manager

RE: INDUSTRI-PLEX SITE PRE-DESIGN INVESTIGATION

SITE MONITORING PLAN INTERIM FINAL REPORT, ISRT-PDI-33

Gentlemen:

On behalf of the Industri-Plex Site Remedial Trust, we are pleased to submit the attached Pre-Design Investigation Site Monitoring Plan Interim Final Report for the Industri-Plex Site in Woburn, Massachusetts. This report is being submitted in accordance with the Pre-Design Investigation Work Plan (PDI) reporting requirements (Section 3.6, p. 118 and Section 3.8.1.5, p. 131).

If you have any questions, please contact us.

Very truly yours,

GOLDER ASSOCIATES INC.

Kenneth R. Moser, Associate

Project Manager

KRM/bjt 62550426

cc: J. Naparstek, MDEP

A. Ostrofsky, NUS

D. L. Baumgartner, ISRT

W. L. Smull, ISRT

J. W. Voss, Golder

TABLE OF CONTENTS

SECT:	ION		<u>PAGE</u>
Cove:	r Let	ter	i
Table	e of	Contents	ii
1.0	1.1 1.2	ODUCTION Purpose Consent Decree Objectives References	1-1 1-1 1-1 1-3
2.0	2.1	TH AND SAFETY COMPLIANCE MONITORING Health and Safety Monitoring Requirements during the Pre-Design Investigation Health and Safety Compliance Documentation 2.2.1 OSHA 29 CFR 1910.120 Compliance 2.2.2 Health and Safety Briefings 2.2.3 Ambient Air Quality Monitoring References	2-1 2-1 2-1 2-1 2-2 2-2 2-2
3.0	3.1 3.2	HIDE PILE SETTLEMENT MONITORING Monitoring Objectives Monitoring Results References	3-1 3-1 3-1 3-2
4.0	4.1	ORDWATER REMEDY MONITORING Groundwater Extraction Monitoring System 4.1.1 Monitoring System Objectives 4.1.2 Monitoring System Data Needs 4.1.3 Data Collection 4.1.3.1 Monitoring Network 4.1.3.2 Monitoring Well Construction 4.1.3.3 Monitoring Parameters 4.1.3.4 Monitoring Schedule 4.1.3.5 Monitoring Procedures 4.1.4 Monitoring Data Evaluation and Presentation Groundwater Treatment Monitoring System References	4-1 4-2 4-3 4-4 4-5 4-5 4-7 4-7 4-8 4-9
5.0	5.1 5.2 5.3	MONITORING Introduction Review of Existing Data Data Needs Rationale for Addressing the Data Needs 5.4.1 Data Need Number 1 5.4.2 Data Need Number 2 5.4.3 Data Need Number 3 5.4.4 Data Needs Number 4	5-1 5-1 5-2 5-4 5-5 5-5 5-5 5-7 5-8

TABLE	OF	CONTENTS	(continued)

SECTION		PAGE
5.5	Field Procedures	5-9
	5.5.1 Ambient Air Sampling Field Procedures	5-9
	5.5.1.1 Sampling Objectives	5-9
	5.5.1.2 Sampling Locations	5-9
	5.5.1.3 Sampling Overview	5-11
	5.5.2 Stack Sampling Field Procedures	5-11
	5.5.2.1 Sampling Objectives	5-12
	5.5.2.2 Sampling Locations	5-12
	5.5.2.3 Sampling Overview	5-13
5.6	Laboratory Methods	5-15
	5.6.1 Ambient Air Sampling	5-15
	5.6.2 East Hide Pile Shrouded Flare Stack Sampling	5-15
5.7	Summary	5 -1 6
	References	5-18

LIST OF TABLES

Table	3-1	East Hide Pile Settlement Monitoring Point
	•	Elevation Data
Table	5-1	Summary of Ambient Air Monitoring Plan
Table	5-2	Field Sampling and Analysis Requirements for
		Ambient Air Monitoring Plan
Table	5-3	Summary of East Hide Pile Shrouded Flare
		Sampling Plan

LIST OF FIGURES

Figure 3-1	East Hide Locations	e Pile	Settlement	Monitoring
Figure 3-2		Data for	Point SM-1	
Figure 3-3	Settlement	Data for	Point SM-2	·
Figure 3-4	Settlement	Data for	Point SM-3	
Figure 3-5	Settlement	Data for	Point SM-4	
Figure 3-6			Point SM-5	
Figure 3-7			Point SM-6	
Figure 3-8			Point SM-7	
Figure 3-9			Point SM-8	
Figure 3-10	Settlement	Data for	Point SM-9	
Figure 3-11	Settlement	Data for	Point SM-10	
Figure 3-12	Settlement	Data for	Point SM-11	
Figure 3-13			Point SM-12	
Figure 5-1	Rationale :	for Addres	ssing Data Nee	ed Number 1
Figure 5-2			ssing Data Nee	
Figure 5-3			ssing Data Nee	
Figure 5-4			ssing Data Nee	
Figure 5-5			ed Particulate	

TABLE OF CONTENTS (continued)

LIST OF FIGURES (continued)

Figure 5-6 Ambient Air TRS Sampling Locations

Figure 5-7 Flare Stack Sampling Program

LIST OF APPENDICES

Appendix 2-1 Appendix 2-2	29 CFR 1910.120 Training Certificates Health and Safety Briefing Records
Appendix 2-3	Ambient Air Monitoring Records
Appendix 5-1	Field Sampling Procedures
Appendix 5-2	Quality Assurance/Quality Control Plan
Appendix 5-3	Reference Method for the Determination of Ambient Air Total Suspended Particulate
Appendix 5-4	Reference Method for the Determination of Ambient Air PM ₁₀
Appendix 5-5	Reference Methods for the Determination of Lead, Arsenic, and Chromium in Ambient Total Suspended Particulate
Appendix 5-6	Reference Method for the Determination of Total Reduced Sulfur Continuous Emissions From Stationary Sources
Appendix 5-7	Reference Method for the Determination of Total Reduced Sulfur Speciation Emissions From Stationary Sources
Appendix 5-8	Reference Methods for the Determination of Volatile Organic Compounds From Stationary Sources
Appendix 5-9	Reference Method for the Determination of Gas Flow Rates From Stationary Sources
Appendix 5-10	Reference Method for the Determination of

Figures Appendix 5-1

A5-1.1 Sample Collection Data Sheets for TSP and PM₁₀ Ambient Air Sampling

Bulk Gas Composition From Stationary Sources

- A5-1.2 Total Reduced Sulfur Compound Sample Collection
 Data Form for TRS Ambient Air Sampling
- A5-1.3 Ambient Air Sampling Locations
- A5-1.4 Volatile Organic Sampling Train System
- A5-1.5 TRS Continuous Emission Monitoring System
- A5-1.6 Total Reduced Sulfur Continuous Monitoring QA/QC Checklist
- A5-1.7 Volatile Organic Sampling Train Sampling QA/QC Checklist
- A5-1.8 Stack Gas Flow Rate Data Sheet

Tables Appendix 5-2

- A5-2.1 Analytical Methods and Quality Control Limits
- A5-2.2 Method Detection Limits

1.0 INTRODUCTION

1.1 Purpose

This report is submitted in fulfillment of the Interim Final Report deliverable for Task SM, Site Monitoring Plan, as specified in Section 3.6 (pages 118 to 121) and Section 3.8.1.5 (page 131) of the Industri-Plex Site Pre-Design Investigation Work Plan (PDIWP, Golder Associates Inc., 1989).

The purpose of this Site Monitoring Plan is to present the results of the Health and Safety Monitoring program implemented during the Pre-Design Investigation; to provide settlement data from the East Hide Pile for a period of one year, and to identify monitoring requirements and procedures for the operation of the temporary gas treatment system and the groundwater remedy.

Section 1 of this report presents the applicable Consent Decree Objectives. Section 2 summarizes Health and Safety Monitoring requirements and includes Health and Safety Compliance documentation. Section 3 presents the results of one year of settlement monitoring for the East Hide Pile. Monitoring requirements and proposed procedures for data acquisition and data evaluation for the groundwater remedy are discussed in Section 4. Section 5 presents procedures and methodology for monitoring the temporary gas treatment system and ambient air.

1.2 Consent Decree Objectives

On April 24, 1989, a Consent Decree (USEPA, 1989) was entered into between the Industri-Plex Site Remedial Trust (ISRT), the United States Environmental Protection Agency (USEPA), and the Massachusetts Department of Environmental Protection (MDEP), which defines the scope of the remediation at the Industri-Plex Site in Woburn,

Massachusetts (USEPA, 1989). The Consent Decree also defines the objectives for the Site Monitoring Program as follows:

- "...This comprehensive monitoring program shall encompass all air, groundwater, surface water, and soil monitoring required throughout the Remedial Design and Remedial Action. Note that monitoring to be conducted after completion of the Remedial Action shall be included in the Operation and Maintenance program (set forth in part 4.a. below). The comprehensive monitoring program shall include monitoring to be conducted, at a minimum, for the following purposes:
 - (a) to assure compliance with the health and safety plan developed pursuant to this RD/AP;
- (b) to provide data to assist in the development of the temporary gas treatment system to be operated at the East Hide Pile;
- (c) to monitor the operation of the temporary gas treatment system and provide sufficient data to characterize the emissions and design the final gas treatment system;
- (d) to monitor the rate of settling of the East Hide Pile and to determine when equilibrium within the pile has been reached; and
- (e) to monitor the performance of the interim groundwater remedy and to determine when approved performance standards for the "hot spots" have been reached."

This interim final report addresses the following aspects of the Consent Decree Objectives as outlined above:

- (a) Health and Safety Compliance;
- (b) Air Quality Monitoring during Temporary Gas Treatment:
- (d) Settlement Monitoring at East Hide Pile; and
- (e) Groundwater Remedy Monitoring.

Documentation in fulfillment of Item (b), Air Quality Monitoring Data for the Development of the Temporary Gas Treatment System, has been submitted separately as part of the PDI Task A-2 Gas Treatability Interim Report (Golder Associates, 1990a) and Interim Final Report (Golder Associates, 1990b).

1.3 References

USEPA, see U.S. Environmental Protection Agency

U.S. Environmental Protection Agency, 1989. <u>Industri-Plex Site Consent Decree</u>, Civil Action 89-01-96-MC, April.

2.0 HEALTH AND SAFETY COMPLIANCE MONITORING

2.1 Health and Safety Monitoring Requirements during the Pre-Design Investigation

The Health and Safety monitoring requirements and procedures implemented during the Pre-Design Investigation at the Industri-Plex Site are outlined in the Project Operations Plan (Golder Associates, 1989). All personnel involved with on-site activities were required to acknowledge and comply with the procedures outlined in the Health and Safety Plan. Any additional health and safety procedures required by the owner/operator of the site were also to be followed.

In accordance with the Project Operations Plan requirements, the following Health and Safety monitoring and compliance documentation is included in this report:

- documentation of understanding of the contents of the Health and Safety Plan by on-Site workers;
- records of initial site Health and Safety briefings;
- 3. records of worker training pursuant to OSHA 29 CFR 1919.120; and
- 4. records of personal air monitoring performed during the investigation.

2.2 Health and Safety Compliance Documentation

2.2.1 OSHA 29 CFR 1910.120 Compliance

All personnel engaged in on-site activities complied with the requirements of OSHA 29 CFR 1910.120, specifically:

- 1. 40 hours of initial classroom instructions and field exercises in hazardous waste site investigation health and safety procedures up to and including USEPA "Level B" personnel protection;
- 2. annual 8 hour refresher course; and

8 hours of health and safety training for supervisors (if applicable).

Copies of the applicable Health and Safety Certificates for various personnel are included in Appendix A-1.

2.2.2 Health and Safety Briefings

All personnel engaged in on-site activities were required to carefully read and acknowledge understanding of the site specific Health and Safety Plans. Special Health and Safety site briefings were held by the Health and Safety Officer for all personnel entering the site for the first time or at the beginning of a new work task. In addition, weekly Health and Safety briefings were held for all personnel working at the site at that time to review those Health and Safety procedures applicable to the work tasks to be conducted.

Records of Health and Safety briefings are contained in Appendix A-2.

2.2.3 Ambient Air Quality Monitoring

The Health and Safety Plan identified task-specific levels of personal protective equipment and personnel monitoring requirements, including action levels based on ambient air monitoring. Records of ambient air quality monitoring conducted during the above PDI tasks are contained in Appendix A-3.

2.3 References

USEPA, see U.S. Environmental Protection Agency

U.S. Environmental Protection Agency, 1989. <u>Industri-Plex</u> <u>Site Consent Decree</u>, Civil Action 89-01-96-MC, April. APPENDIX 2-1

29 CFR 1910.120 Training Certificates



Certificate of Completion

Presented To

CHRISTOPHER AGOGLIA

in Recognition of Having Successfully Completed
the Prescribed Course of Study for

Hazards & Protection Limited

Kevin Hulbard

Dif-mchalley

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

n October 10 1989, I, Christopher Agoglia (date) (printed name)
eceived 8 hours of hazardous waste related health and safety refresher
raining, including the following topics:
Brief review of OSHA requirements and health and safety program
Brief review of hazardous properties of chemical substances
Review of instrumentation (hands on instrument practical)
alf Day Field Exercise Including:
Review of respiratory protection and SCBA check out procedures
Review of chemical protective clothing
Review of site entry, site control, decontamination procedures
Review of emergency prepardeness and procedures
Review of Golder Associates Inc. health and safety procedures
Mock "site" activities, including hands-on use of PPE, SCBAs, and airline respirators, and decontamination.
All of the above
Christophe Con Cia 10/2/89
mployee signature Date
S. Dem & Azer 10/12/89
nstructors' Signature Date

HAZARDOUS WASTE SITE SUPERVISORS'

HEALTH AND SAFETY TRAINING ACKNOWLEDGEMENT

On	11/10 4 10/11, 1, Christoche- Hack
	(date) / (printed name)
recei	ived 8 hours of health and safety training for hazardous waste
super	rvisors, including the following topics:
	Health and Safety Management
	Introduction to OSHA requirements and the supervisor's role in occupational health and safety
	Overview of occupational hazards associated with hazardous waste related projects
	Discussion of preparation of project specific health and safety plans
	Overview of Golder Associates Inc. Health and Safety program
	Overview of Medical Surveillance Program
	Overview of Air Monitoring Procedures and Action Levels
	Overview of Respiratory Protection Program
	Overview of Chemical Protective Clothing Program
	Site entry, site control, decontamination procedures
	Emergency prepardeness and procedures
	Discussion of Golder Associates Inc. Health and Safety Program and the Supervisor's role in implementation
	All of the above
Ć,	Pustophie Agadia 10/1/89
Emplo	oyee signature
Δ	Den 2 Jagar 10/1/89
Insti	ructors/ Signature/\ Date /



Hazardous Waste Site Investigation

Certificate Health and Safety Training Course of Completion

Presented to

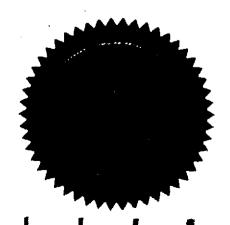
Elizabeth Auda

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA Level B' personal protection.

NOTE: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring Level A protection

William L. Hager CIH #3899

Training Director





Hazardous Waste Site Investigation

Certificate Health and Safety Training Course of Completion

Presented to

William Bingham

instructi site i

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA 'Level B' personal protection.

NOTE: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring 'Level A' protection William L. Hager CIH #28 5
Training Director

June 11 - 15, 1990

Date



Hazardous Waste Site Investigation Health and Safety Training Course

Certificate of Completion

Presented to

Mary C. Bourcier

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA "Level B" personal protection.

Note: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring "Level A" protection.

24-28 1989

Date of Training

Mary Le Training T

Fraining Director

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY TRAINING ACKNOWLEDGEMENT

_			•.
Z	All of topics listed below		
Ī		RA, CERCLA regulatory requ	
		quirements and occupational	health and safety
	Overview of occupational		
	introduction to toxicology		
	Hazardous properties of o	chemical substances	
	Instrumentation		•
	Respiratory protection		
	Hands-on SCBA training		
	Chemical protective dothi	ing	. •
	Jonizing Radiation		
	-	contamination procedures	
	Emergency preparedness	•	
	Applications to Golder As	- ·	
	Hands-on air monitoring	- · · · · · · · · · · · · · · · · · · ·	
	Field exercise with SCBA'	s, Airlines, and Chemical Pro	tective Clothing
17	74 11 R	Atlanta, GA	·
Em		imployee's Office	February 5, 199 Date



Hazardous Waste Site Investigation Health and Safety Training Course

Certificate of Completion

Presented to

Cheryl Brooks

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA "Level B" personal protection.

Note: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring "Level A" protection.

July 24-28, 1989

Date of Training

Training Pilector

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

On .	May 11 1990 I, Cheryl Brooks (date) (printed name)
	ved hours of health and safety refresher training for hazardous waste site stigation, including the following topics:
K.	All those listed below
]	Brief review of OSHA requirements and health and safety program
ר	Brief review of hazardous properties of chemical substances
]	Review of instrumentation (hands on instrument practical)
	Half Day Field Exercise Including:
<u>ן</u>	Review of respiratory protection and SCBA check out procedures
_ 	Review of chemical protective clothing
_ ~ _	Review of site entry, site control, decontamination procedures
_ ŋ 	Review of emergency preparedness and procedures
ר נ	Review of Golder Associates Inc. health and safety procedures
	Mock "site" activities, including hands-on use of PPE, SCBAs, and airline respirators, and decontamination.
<u>//</u> Empl	Atlanta May 11 1990 Region of the Employee's Office Date
Instr	Location of Training Course

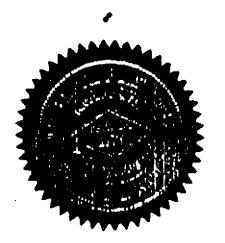


Hazardous Waste Site Investigation

Certificate Health and Safety Training Course of Completion

Presented to

Rose A. Capper



In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA 'Level B' personal protection.

> NOTE: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring Level A protection

William L. Hager CIH # \$899 Training Director

Date

HAZARDOUS WASTE SITE INVESTIGATION HEALTH AND SAFETY TRAINING ACKNOWLEDGEMENT

	ning and understood the material presented which included the
fell	owing topics:
	Introduction to TSCA, RCRA, CERCLA regulatory requirements
	Introduction to OSHA requirements and occupational health and safe
	Overview of occupational hazards
	Introduction to toxicology
	Hazardous properties of chemical substances
	Instrumentation
	Respiratory protection
	Hands-on SCBA training
	Chemical protective clothing
	Site entry, site control, decontamination procedures
	Emergency prepardeness and procedures
	Applications to Golder Associates projects
	Field exercise
\boxtimes	All of the above



Hazardous Waste Site Investigation

Certificate Health and Safety Training Course of Completion

Presented to

Patrick Considine

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA 'Level B' personal protection.

NOTE: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring 'Level A' protection William L. Hager CIH #2875 Training Director

June 11-15, 1990

Date

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY TRAINING ACKNOWLEDGEMENT

follo	wing topics: All of topics listed below
H	Introduction to TSCA, RCRA, CERCLA regulatory requirements
	Introduction to OSHA requirements and occupational health and safety Overview of occupational hazards
	Introduction to toxicology
	Hazardous properties of chemical substances
	Instrumentation
	Respiratory protection
	Hands-on SCBA training
	Chemical protective clothing
	Ionizing Radiation
	Site entry, site control, decontamination procedures
	Emergency preparedness and procedures
<u>B</u>	Applications to Golder Associates projects
<u>D</u>	Hands-on air monitoring instrument practical
9	Field exercise with SCBA's, Airlines, and Chemical Protective Clothing
Fai Emp	Tull Considera Mt. Laurel, NJ 06/15/90 loyee's Signature Employee's Office Date
instr	Light NJ Location of Training Course

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

During the w	reek of Marc	ch 4 , 1990	Robert M.	Glazier
J	Da		Na	me
reviewed an a areas:	8 hour video taped	health and safety	presentation inclu	ding the following topic
•	toxicology			
•	properties of haz	ardous chemical su	bstances	
•	use of air purifying	ng respirators		
•	use of self contain	ned breathing appa	ratus	
•	confined space er	ntry procedures		
•	calibration and u	se of photo ionizati	on detectors	·
•	calibration and u	se of the Foxboro (DVĄ	
in fulfillment 1910.120 (e)(8		ur annual refreshe	r training requiren	nents set forth in 29CFR
	UL &	Supervisor	Da	March 8, 1991 te
	Rober	t M Bluzier	, Da	March 8, 1991

HAZARDOUS WASTE SITE SUPERVISORS'

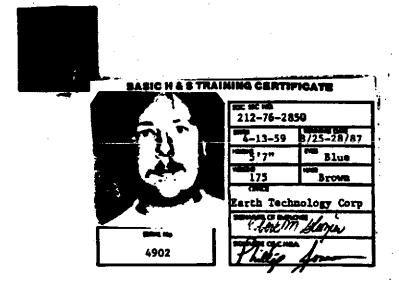
HEALTH AND SAFETY TRAINING ACKNOWLEDGEMENT

On _(October 10 and 11, 1989; 1, Robert M. Glazier (date) (printed name)
recei	ved 8 hours of health and safety training for hazardous waste
super	rvisors, including the following topics:
回	Health and Safety Management
Q	Introduction to OSHA requirements and the supervisor's role in occupational health and safety
Q	Overview of occupational hazards associated with hazardous waste related projects
\(\overline{\pi}\)	Discussion of preparation of project specific health and safety plans
Q	Overview of Golder Associates Inc. Health and Safety program
Q`	Overview of Medical Surveillance Program
Image: section of the properties of t	Overview of Air Monitoring Procedures and Action Levels
Ø,	Overview of Respiratory Protection Program
∄	Overview of Chemical Protective Clothing Program
_ य	Site entry, site control, decontamination procedures
a	Emergency prepardeness and procedures
<u> </u>	Discussion of Golder Associates Inc. Health and Safety Program and the Supervisor's role in implementation
Ø	All of the above
	object M Alaster 10/11/89 Date
Insti	On Page 1/1/89

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

On	October 12 1989
	(date) (printed name)
receive	ed 8 hours of hazardous waste related health and safety refresher
traini	ng, including the following topics:
	Brief review of OSHA requirements and health and safety program
	Brief review of hazardous properties of chemical substances
	Review of instrumentation (hands on instrument practical)
Half D	ay Field Exercise Including:
	Review of respiratory protection and SCBA check out procedures
	Review of chemical protective clothing
	Review of site entry, site control, decontamination procedures
	Review of emergency prepardeness and procedures
	Review of Golder Associates Inc. health and safety procedures
	Mock "site" activities, including hands-on use of PPE, SCBAs, and airline respirators, and decontamination.
	All of the above
Ro	best M Blaner 10/12/89
Employ	ee signature Date
Xn	n . D &
<u>U.V</u>	Luin 7 1/2/29
Instru	ctors Signature Date Date





Hazardous Waste Site Investigation Health and Safety Training Course

Certificate of Completion

Presented to

Robert Illes

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA "Level B" personal protection.

Note: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring "Level A" protection.

July 22-24, 1987 June 27, 28, 1988

D. Dung of

Training higher (311)



Hazardous Waste Site Investigation Health and Safety Training Course

Certificate of Completion

Presented to

Bob Mes

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA "Level B" personal protection.

Note: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring "Level A" protection.

Date of Training

Training Director

HAZARDOUS WASTE SITE INVESTIGATION HEALTH AND SAFETY TRAINING ACKNOWLEDGEMENT

on July 22-24, 1987, 1, Robert Illes
(date) (printed name)
received hours of hazardous waste related health and safety
training and understood the material presented which included the
following topics:
Introduction to TSCA, RCRA, CERCLA regulatory requirements .
Introduction to OSHA requirements and occupational health and safety
Overview of occupational hazards
Introduction to toxicology
Hazardous properties of chemical substances
Instrumentation
Respiratory protection
Hands-on SCBA training
Chemical protective clothing
Site entry, site control, decontamination procedures
Emergency prepardeness and procedures
Applications to Golder Associates projects
Field exercise
All of the above
- let 1 Me (1/2/20

Date

Employee signature

HAZARDOUS WASTE SITE INVESTIGATION HEALTH AND SAFETY TRAINING ACKNOWLEDGEMENT

-	on June 27,28, 1988 . 1. Robert Illes.
	received (date) (printed name) received hours of hazardous waste related health and safety
	training and understood the material presented which included the
#	following topics:
4	
	Introduction to TSCA, RCRA, CERCLA regulatory requirements .
.a	Introduction to OSHA requirements and occupational health and safety
•	Overview of occupational hazards
•	Introduction to toxicology
	Hazardous properties of chemical substances
•	Instrumentation
	Respiratory protection
	Hands-on SCBA training
_	Chemical protective clothing
	Site entry, site control, decontamination procedures
•	Emergency prepardeness and procedures
	Applications to Golder Associates projects
	Field exercise
•	All of the above
•	11/1 1 1ll 10/13/89
	Employee signature Date
-	

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

0	10/10/15 . R. A. T. T. 11/15
Un	10 / 12 / 15 , 1, Related name)
recei	ved 8 hours of hazardous waste related health and safety refresher
train	ing, including the following topics:
	Brief review of OSHA requirements and health and safety program
	Brief review of hazardous properties of chemical substances
	Review of instrumentation (hands on instrument practical)
Half !	Day Field Exercise Including:
	Review of respiratory protection and SCBA check out procedures
	Review of chemical protective clothing
	Review of site entry, site control, decontamination procedures
	Review of emergency prepardeness and procedures
	Review of Golder Associates Inc. health and safety procedures
	Mock "site" activities, including hands-on use of PPE, SCBAs, and airline respirators, and decontamination.
	All of the above
	yee signature Date
Emp /o	yee signature Date
X	Westors Signature 2 Date
Instr	uctors Signature Date



Hazardous Waste Site Investigation Health and Safety Training Course

Certificate of Completion

Presented to

Ian A. Kennedy

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA "Level B" personal protection.

Note: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring "Level A" protection.

24-28, 1989.

Date of Training

Training Direct

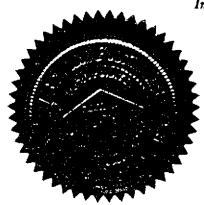


Hazardous Waste Site Investigation

Certificate Health and Safety Training Course of Completion

Presented to

Dave Ley



In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA 'Level B' personal protection.

NOTE: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring "Level A" protection William L. Hager CIH #2876) Training Director

February 18 - 22,1991

Date

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY TRAINING ACKNOWLEDGEMENT

On .	February 18-22, 1	991, I, Dave Ley	
	(date)	(printed nam	ne)
rece	ived 40 hours of ha	zardous waste related health	and safety training including
	wing topics:		
	All of topics listed bel	ow	
	Introduction to TSCA, RCRA, CERCLA regulatory requirements		
	Introduction to OSHA requirements and occupational health and safety		
	Overview of occupational hazards		
	Introduction to toxicology		
	Hazardous properties of chemical substances Instrumentation		
	Respiratory protection		
	Hands-on SCBA training Chemical protective clothing		
	Ionizing Radiation		
	•	, decontamination procedure	S
	Emergency preparedness and procedures		
	Applications to Golde	• •	
		ing instrument practical	Description (That the
n	rieid exercise with SC	BA's, Airlines, and Chemical	rrotective Clothing
N			
{}x	1.11 .1/2/		
Y/J	wingered ==	Golder - Mt. Laure	02/22/91
Emp	loyee's Signature	Employee's Office	Date
	•	Golder Associates Inc.	
<u>Lu</u>	in Leva_	Atlanta, Georgia	-
Instr	uctor's Signature	Location of Training Cour	se



Golder Associates Inc.

Hazardous Waste Site Investigation Health and Safety Training Course

Certificate of Completion

Presented to

Benjamin A. Mangina

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA "Level B" personal protection.

Note: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring "Level A" protection.

October 12-16, 1988

Date of Training

alling L.

Training Director

HAZARDOUS WASTE SITE INVESTIGATION HEALTH AND SAFETY TRAINING ACKNOWLEDGEMENT

ıd
ents

Copy W. Hager 1/1. 19

GOLDER ASSOCIATES INC.

MAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

On _ 1	JANUARY, 5, 1990, I, BEN MANGENA (printed name)
	ved 8 hours of hazardous waste related health and safety refresher
train	ing, including the following topics:
<u></u>	
	Brief review of OSHA requirements and health and safety program
	Brief review of hazardous properties of chemical substances
	Review of instrumentation (hands on instrument practical)
Half (Day Field Exercise Including:
	Review of respiratory protection and SCBA check out procedures
	Review of chemical protective clothing
	Review of site entry, site control, decontamination procedures
	Review of emergency prepardeness and procedures
	Review of Golder Associates Inc. health and safety procedures
	Mock "site" activities, including hands-on use of PPE, SCBAs, and airline respirators, and decontamination.
X	All of the above
Ber	Mangein 1/5/90
/-/ Fubio	yee signature. Date
AM	115/40
instr	ugrors' Signature Date

Regime For Your records. KOM



Golder Associates, Inc.

Hazardous Waste Site Investigation Health and Safety Training Course

Certificate of Completion

Presented to

Ken Moser

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA "Level B" personal protection.

Note: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring "Level A" protection.

November 16-20, 1987

Trainiful Director

GOLDER ASSOCIATES INC.

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

On	OCTOBER 12,1989, I, KENNETH R. MOSER (date) (printed name)
recei	ved 8 hours of hazardous waste related health and safety refresher
	·
train	ing, including the following topics:
	Brief review of OSHA requirements and health and safety program
	Brief review of hazardous properties of chemical substances
	Review of instrumentation (hands on instrument practical)
Half	Day Field Exercise Including:
	Review of respiratory protection and SCBA check out procedures
	Review of chemical protective clothing
	Review of site entry, site control, decontamination procedures
	Review of emergency prepardeness and procedures
	Review of Golder Associates Inc. health and safety procedures
	Mock "site" activities, including hands-on use of PPE, SCBAs, and airline respirators, and decontamination.
X	All of the above
16	Quality R. Mises 15/12/29
Emplo	yee signature Date
X	0 dans (5/12/89
Instr	uctors' Signature A Date

GOLDER ASSOCIATES INC.

HAZARDOUS WASTE SITE SUPERVISORS' HEALTH AND SAFETY TRAINING ACKNOWLEDGEMENT

On	October 10-11 1989, 1, KENNETH R. MOSER (date) (printed name)
recei	ved 8 hours of health and safety training for hazardous waste
super	visors, including the following topics:
	Health and Safety Management
	Introduction to OSHA requirements and the supervisor's role in occupational health and safety
	Overview of occupational hazards associated with hazardous waste related projects
	Discussion of preparation of project specific health and safety plans
	Overview of Golder Associates Inc. Health and Safety program
	Overview of Medical Surveillance Program
	Overview of Air Monitoring Procedures and Action Levels
	Overview of Respiratory Protection Program
	Overview of Chemical Protective Clothing Program
	Site entry, site control, decontamination procedures
	Emergency prepardeness and procedures
	Discussion of Golder Associates Inc. Health and Safety Program and the Supervisor's role in implementation
	All of the above
Emplo:	Level 10/11/84 yee signature Date
Instri	Dan & Agas 10/1/89
41136	bate .



Golder Associates, Inc.

Hazardous Waste Site Investigation Health and Safety Training Course

Certificate of Completion

Presented to

Mark R. Sandfort

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA "Level B" personal protection.

Note: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring "Level A" protection.

Jun 22,-28, 1988

Training Hisector

GOLDER ASSOCIATES INC.

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

During the v	veek of <u>March 4</u> , 1990 _ Date	Mark R. Sandfort Name
reviewed an areas:	8 hour video taped health and safety pr	
•	toxicology	
•	properties of hazardous chemical subs	stances
•	use of air purifying respirators	
•	use of self contained breathing appara	atus
•	confined space entry procedures	
•	calibration and use of photo ionization	n detectors
•	calibration and use of the Foxboro OV	VA
in fulfillmen 1910.120 (e)(training requirements set forth in 29CFR
	Training Supervisor	<u>March 8, 1991</u> Date
	Mal Rouga Trainee	March 8, 1991 Date

GOLDER ASSOCIATES INC.

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

On	12 October 1777, 1, Mark R. Sendfort (date) (printed name)
	(date) (printed name)
recei	ved 8 hours of hazardous waste related health and safety refresher
train	ing, including the following topics:
Z Z	Brief review of OSHA requirements and health and safety program
	Brief review of hazardous properties of chemical substances
Ø	Review of instrumentation (hands on instrument practical)
Half!	Day Field Exercise Including:
Ø	Review of respiratory protection and SCBA check out procedures
<u>.</u>	
<u>N</u>	Review of chemical protective clothing
[2	Review of site entry, site control, decontamination procedures
×	Review of emergency prepardeness and procedures
Ø	Review of Golder Associates Inc. health and safety procedures
	Mock "site" activities, including hands-on use of PPE, SCBAs, and airline respirators, and decontamination.
X	All of the above
M	1200-89
Emplo	yee signature Date
X.	N=12/29
Instr	ructors' Signature Date



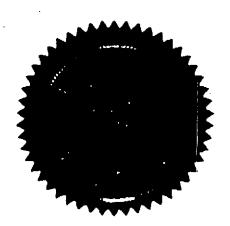
Golder Associates Inc.

Hazardous Waste Site Investigation

Certificate Health and Safety Training Course of Completion

Presented to

John Thomas



In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA 'Level B' personal protection.

NOTE: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring 'Level A' protection William L. Hager CIH 4 3899 Training Director

January 15-19, 1992

GOLDER ASSOCIATES INC.

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

On	December 4, 5, and 6, 1990		John Thomas
	(date)		(printed name)
	ived 12 hours of health and safety stigation, including the following to		ing for hazardous waste site
IXI I	All those listed below		
	Brief review of OSHA requirement	s and health ar	nd safety program
	Brief review of hazardous properti	es of chemical s	rubstances
	Review of instrumentation (hands	on instrument	practical)
	Half Day Field Exercise Including:		
	Review of respiratory protection as	nd SCBA check	out procedures
	Review of chemical protective cloth	ning	
	Review of site entry, site control, d	econtamination	r procedures
	Review of emergency preparedness	s and procedure	es
	Review of Golder Associates Inc. h	ealth and safety	y procedures
	Mock "site" activities, including har and decontamination.	nds-on use of P	PE, SCBAs, and airline respirators,
<i>]</i> 。	In Moms Atlant	a, Sa	Dec. 10, 1990
Emp	ployee's Signature Employee's	Office	Date (
	0 - 2.1		

Location of Training Course

Instructor's Signature



Golder Associates Inc.

Hazardous Waste Site Investigation Health and Safety Training Course

Certificate of Completion

Presented to

James W. Voss

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA "Level B" personal protection.

Note: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring "Level A" protection.

ather 12-16, 1988

Date of Training

Training Director

MEMORANDUM

TO: J.W. Voss

February 6, 1991

FR:

William Hager, CIH, CSP

RE:

EIGHT HOUR OSHA HEALTH AND SAFETY REFRESHER TRAINING

This memo shall serve as certification that having reviewed the video tapes listed below, you have satisfactorily completed 8 hours of hazardous waste health and safety refresher training and are current with OSHA 1910.120 (e)(8) requirements until December 31, 1991.

MSA 361: Classroom and Demonstration
Health and Safety Training Tape: Toxicology, Chemical
Properties, H.S., Confined Space, The Right to Breath Safely
Flame Ionization Detectors: Classroom and Demonstration
Respiratory Protection
Don't Let it Get you Down: Hydrogen Sulfide

Fools Rush In: Confined Space Entry

Air Purifying Respirators

Please be advised that it is Golder Associates Inc.'s policy that the videotaped training is acceptable as refresher training only every other year. In other words, your next refresher training session must include the hands-on SCBA, air-line, chemical protective clothing field exercise.

WLH/trl



Golder Associates Inc.

Hazardous Waste Site Investigation

Certificate Health and Safety Training Course of Completion

Presented to

Jim Whitty



In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA 'Level B' personal protection.

NOTE: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring 'Level A' protection William L. Hager CIH \$3899 Training Director

Date 22-24, 1987 December, 10, 11, 1987



Golder Associates

CERTIFICATE OF COMPLETION HAZARDOUS WASTE SITE HEALTH AND SAFETY TRAINING COURSE

CERTIFIED BY

THIS IGH DAY OF DECEMBER 1987

GOLDER ASSOCIATES INC.

HAZARDOUS WASTE SITE INVESTIGATION

HEALTH AND SAFETY REFRESHER TRAINING ACKNOWLEDGEMENT

On	October (date)	12,1989	_, I,	JAMES	Ē.	WHITTY
receive	(date) d 8 hours of haz			••	•	
	g, including the				•	
	rief review of O	SHA requiremen	nts and he	alth and sa	fety pi	rogram
	rief review of h	azardous propi	erties of	chemical su	bstance	es
	eview of instrum	entation (hand	ds on inst	rument prac	tical)	
Half Da	y Field Exercise	Including:				
	eview of respira	itory protecti	on and SCB	A check out	proce	dures
	eview of chemica	l protective	clothing			
	eview of site en	itry, site con	trol, deco	ntamination	proce	dures
	eview of emergen	icy prepardene	ss and pro	cedures		
	eview of Golder	Associates In-	c. health	and safety	proced	ures
	ock "site" activ				PE, SC	BAs, and
	all of the above					
G		To		iolial	/ 79	
Employ	e signature	J		Date		
Instru	tors' Signature	w		10/12/8	9	

HAZARDOUS WASTE SITE INVESTIGATION

On _	(date), I, JiH WHITT (printed name)
	ived <u>lb</u> hours of hazardous waste related health and safety ning including the following topics:
	All of topics listed below Introduction to TSCA, RCRA, CERCLA regulatory requirements Introduction to OSHA requirements and occupational health and safety Overview of occupational hazards Introduction to toxicology Hazardous properties of chemical substances Instrumentation Respiratory protection Hands-on SCBA training Chemical protective clothing Ionizing Radiation Site entry, site control, decontamination procedures Emergency preparedness and procedures Emergency preparedness and procedures Applications to Golder Associates projects Hands-on air monitoring instrument practical Field exercise with SCBA's, Airlines, and Chemical Protective Clothing
Emp1	byee's Signature Employee's Office Date Dec 10,11,1987
Inst	ructor/s Signature Location of Training Course

HAZARDOUS WASTE SITE INVESTIGATION

•	(date)		(prir	nted name)
received _	24 hours of h	azardous wast	e related health ar	nd safety
training '	including the follow	ing topics:		
∑ All d	of topics listed bel	OW		
<i>/</i>	oduction to TSCA, RC		gulatory requiremen	nts ·
□ Intro	oduction to OSHA req	uirements and	occupational healt	th and safety
Over	view of occupational	hazards		
□ Intro	oduction to toxicolo	gy		
☐ Hazar	rdous properties of	chemical subs	tances	
☐ Inst	rumentation			
Resp	iratory protection			
Hand:	s-on SCBA training			,
☐ Chem	ical protective clot	hing		
□ Ioni:	zing Radiation			
☐ Site	entry, site control	, decontamina	tion procedures	
☐ Emer	gency preparedness a	and procedures		
☐ Appl	ications to Golder A	Issociates pro	jects	
Hand:	s-on air monitoring	instrument pr	actical	
☐ Field	d exercise with SCBA	ı's, Airlines,	and Chemical Prote	ective Clothing
			·	
A				July 22-24 1987
Employee'	s Signature	Employee's	Office	July 22-24, 1987 Date
\prec	•			
χm	$\int \mathbf{u}$	1	•	
_Willia	w X tone	N _w	crsey	
Instructo	r's Signatu x e	Location o	f Training Course	

GOLDER ASSOCIATES INC.

HAZARDOUS WASTE SITE SUPERVISORS'

On .	(date) (printed name)
ŧ	(date) ' (printed name)
rec	eived 8 hours of health and safety training for hazardous waste
sup	ervisors, including the following topics:
	Health and Safety Management
	Introduction to OSHA requirements and the supervisor's role in occupational health and safety
	Overview of occupational hazards associated with hazardous waste related projects
	Discussion of preparation of project specific health and safety plans
	Overview of Golder Associates Inc. Health and Safety program
	Overview of Medical Surveillance Program
	Overview of Air Monitoring Procedures and Action Levels
Ш	Overview of Respiratory Protection Program
	Overview of Chemical Protective Clothing Program
	Site entry, site control, decontamination procedures
	Emergency prepardeness and procedures
	Discussion of Golder Associates Inc. Health and Safety Program and the Supervisor's role in implementation
	All of the above
Æmp.	Toyee signature () Date
X	(Many Ago.) Intules
Ins	tructors' Signature



Golder Associates Inc.

Hazardous Waste Site Investigation

Certificate Health and Safety Training Course of Completion

Presented to

Cynthia Yates



In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA 'Level B' personal protection.

NOTE: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring 'Level A' protection William L. Hager CIH #3899 Training Director

Dare 15-19, 1990



Golder Associates Inc.

Hazardous Waste Site Investigation

Certificate Health and Safety Training Course of Completion

Presented to

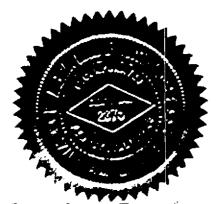
Michael J. Zarenski

In recognition of completion of 40 hours of classroom instruction and field exercises in hazardous waste site investigation health and safety procedures up to and including EPA 'Level B' personal protection.

NOTE: This certificate does not qualify the bearer for hazardous materials emergency response, nor for work in environments requiring 'Level A' protection William L. Hager CIH #2375
Training Director

February 26 - March 2, 1990

Date



HAZARDOUS WASTE SITE INVESTIGATION

سخه	ning including the following topics:
	All of topics listed below
	Introduction to TSCA, RCRA, CERCLA regulatory requirements
	Introduction to OSHA requirements and occupational health and safe
	Overview of occupational hazards
	Introduction to toxicology
	Hazardous properties of chemical substances Instrumentation
_	Respiratory protection
	`
	Chemical protective clothing
	Ionizing Radiation
	Site entry, site control, decontamination procedures
	Emergency preparedness and procedures
	Applications to Golder Associates projects
	Hands-on air monitoring instrument practical
	Field exercise with SCBA's, Airlines, and Chemical Protective Cloth

Program sponsored by:
The National Water, Well Association (
United States Geological Survey,
National Drilling Federation

Certificate of Achievement

The National Water Well Association recognizes

PETER BARCZAK

for completion of all requirements for

Safety at Hazardous Materials Sites: A Hands-On Workshop

Sept. 11-15, 1989

(Date of Course)

40 hours - 29 CFR 1910,120(e)(2)

Valhalla, New York

(Place of Course)

(Signature)

Certificate of Training

This is to certify that

PETER C. BREEN

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

Attested to this 18TH day of SEPTEMBER 19 89

In Cooperation with
The Westchester County NY Fire Training Center

Steven P. Murfanoly Instructor

ROUX ASSOCIATES, INC.

Sponsoring Organization

Certificate

This is to certify that

PETER C. BREEN

is hereby awarded this Certificate signifying

the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES

29 CFR 1910.120 (e) (2) 40 HOURS

Attested to this _6 __ day of __ APRIL___19_87

Instructor Proposition

County Fixe Coordinator

of Training

Certificate

This is to certify that

ROBERT P. CROWELL

is bereby awarded this Certificate signifying

the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES

29 CFR 1910.120 (e) (2) 40 HOURS

Attested to this 6 day of APRIL 19.87

County Executive

County Fire Coordinator

Instructor N

of Training

Certificate of Training

This is to certify that

ROBERT CROWELL

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

In Cooperation with The Westchester County NY Fire Training Center

Shire P. Mus farely
Instructor

ROUX ASSOCIATES, INC.

Sponsoring Organization

ROUX ASSOCIATES INC

CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

ROBERT P. CROWELL

has successfully completed an 8-hour course of instruction in OSHA 29 CFR 1910.120

HAZARDOUS WASTE REFRESHER TRAINING

prepared and conducted by

ROUX ASSOCIATES INC

SEPTEMBER 24, 1990

Date of Award

Stephen C. Smith, CIH, CSP, CHMM Corporate Health & Safety Manager

ROUX ASSOCIATES INC

CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

ROBERT P. CROWELL

has successfully completed an 8-hour course of instruction in OSHA 29 CFR 1910.120

HAZARDOUS WASTE SUPERVISOR TRAINING

prepared and conducted by

ROUX ASSOCIATES INC

SEPTEMBER 25, 1990

Date of Award

Stephen C. Smith, CIH, CSP, CHMM

Corporate Health & Safety Manager

Certificate of Training

This is to certify that

JEFFREY S. DAY

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

Attested to this 18TH day of SEPTEMBER 19 89

In Cooperation with The Westchester County NY Fire Training Center

Steven P. Marfansley
Instructor

ROUX ASSOCIATES, INC.

Sponsoring Organization

Certificate of Training

This is to certify that

THOMAS P. DORISKI

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

Attested to this 18TH day of SEPTEMBER 19 89

In Cooperation with
The Westchester County NY Fire Training Center

Slive P. Mustansley

Dostructor

ROUX ASSOCIATES, INC.

Sponsoring Organization

HOSULTHIES IEL: 5100/3/200 DO.4 COU. ON THE DE. ZO

ificate

This is to certify that

is hereby awarded this Certificate signifying the successful completion of operations at Hazardous Materials sites

BEALTH

Instructor



CERTIFICATE OF TRAINING THIS CERTIFIES THAT

HERBERT W. ERNST

has successfully completed 40 hours of instruction in

WASTE SITE WORKER PROTECTION

Prepared and conducted by Hygiene, Safety and Training Inc. to comply with OSHA 1910.120(e)(2)

Jack M. Peterson
Jek M. Peterson
Jesp, CIH

MAY 18,1990

Date of Completion

ROUX ASSOCIATES INC

CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

HERBERT W. ERNST

has successfully completed an 8-hour course of instruction in OSHA 29 CFR 1910.120

HAZARDOUS WASTE REFRESHER TRAINING

prepared and conducted by

ROUX ASSOCIATES INC

JANUARY 21, 1991

Date of Award

Stephen C. Smith, CIH, CSP, CHMM

Corporate Health & Safety Manager

ROUX ASSOCIATES INC

CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

HERBERT W. ERNST

has successfully completed an 8-hour course of instruction in
OSHA 29 CFR 1910.120
HAZARDOUS WASTE SUPERVISOR TRAINING

prepared and conducted by

ROUX ASSOCIATES INC

JANUARY 22, 1991

Date of Award

Stephen C. Smith, CIH, CSP, CHMM

Corporate Health & Safety Manager

JOHN GERLACH

Has completed a course in

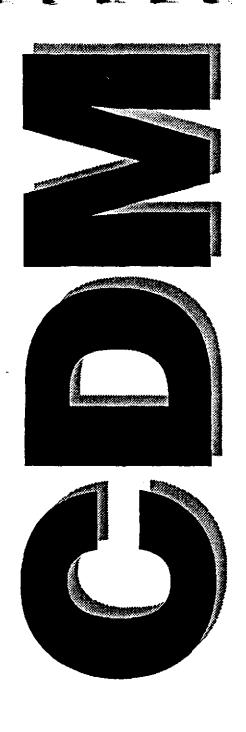
HEALTH AND SAFETY TRAINING FOR HAZARDOUS WASTE ACTIVITIES

This 40-Hour Course Has Been Designed in Accordance With OSHA Training Requirements (CFR 1910.120)
Covering Personnel Involved in Investigation And Remediation Of Hazardous Waste Sites.

Date:	June 10, 1988
	DY01-35

Dynamac Corporation

Dawn M. Smith. Citi



CERTIFICATE OF TRAINING

This Certifies That

John Gerlach

Has Successfully Completed the Training Course

Waste Site Health and Safety for Supervisors (eight hour)

on

June 23, 1990

Presented by Camp Dresser & McKee Christopher S.E. Marlowe, CIH, CSP

Christopher S.E. Marlowe, CIH, CSP Area Health and Safety Manager

CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

JOHN B. GERLACH

has successfully completed an 8-hour course of instruction in
OSHA 29 CFR 1910.120
HAZARDOUS WASTE REFRESHER TRAINING

prepared and conducted by

ROUX ASSOCIATES INC

JANUARY 21, 1991

Date of Award

Stephen C. Smith, CIH, CSP, CHMM



New Jersey / New York Hazardous Materials Worker Training Center

(Partially supported by the National Institute of Environmental Health Sciences)

This is to certify that

Harrison Gregory

Certificate #: UMD1 00455
has successfully completed the course entitled

Health and Safety for Hazardous Waste Site Investigation Personnel 40 Hours

conducted by the
Division of Consumer Health Education
Department of Environmental and Community Medicine
University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School



August 20 - 24, 1990

Date

Expiration Date: August 24, 1991

Auden & Hotel , Doff

Course Director

CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

HARRISON GREGORY

has successfully completed an 8-hour course of instruction in OSHA 29 CFR 1910.120 HAZARDOUS WASTE SUPERVISOR TRAINING

prepared and conducted by

ROUX ASSOCIATES INC

SEPTEMBER 25, 1990

Date of Award

Stephen'C. Smith, CIH, CSP, CHMM

U.S. ENVIRONMENTAL PROTECTION AGENCY

This certifies that

Hillary En Hollister

has completed the

HAZARDOUS MATERIALS INCIDENT RESPONSE OPERATIONS (165.5)

TRAINING COURSE

Edison, New Jersey

Rebruary 6: 10, 1989

2.1 Continuing Education Units Abbarded

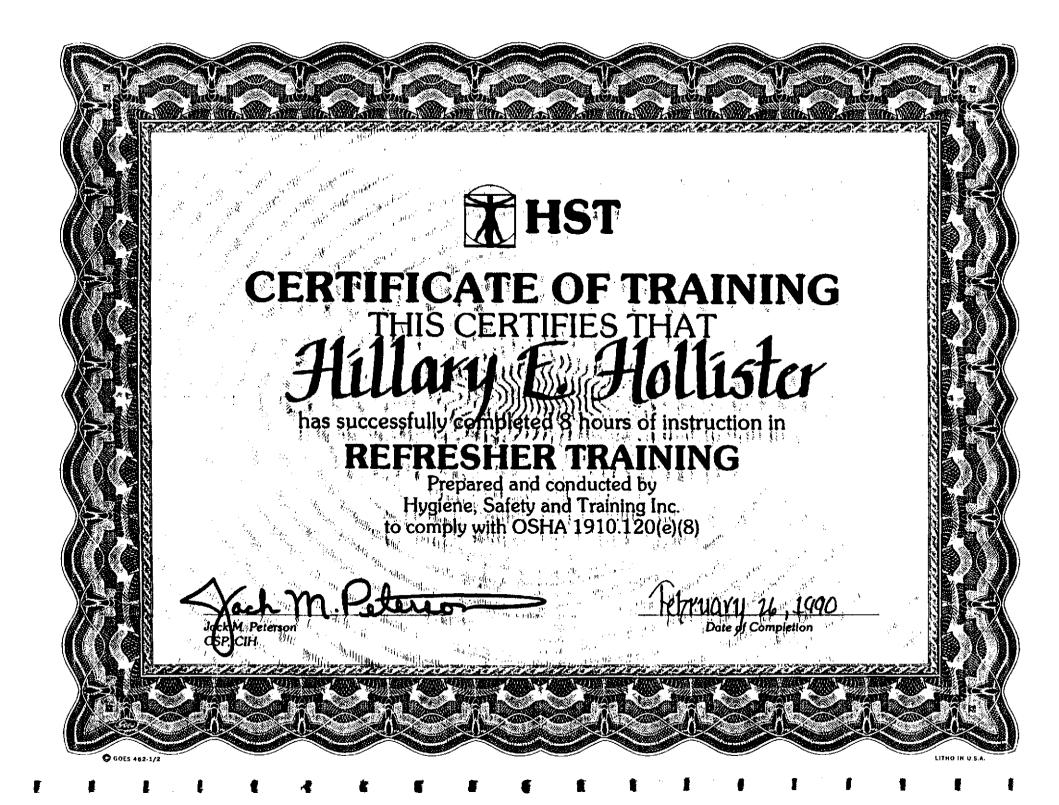
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE

R. H. CEhwell

Course Director

ellery D. Savage

Training Coordinator, Environmental Response Branch



CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

HILLARY E. HOLLISTER

has successfully completed an 8-hour course of instruction in
OSHA 29 CFR 1910.120
HAZARDOUS WASTE SUPERVISOR TRAINING

prepared and conducted by

ROUX ASSOCIATES INC

SEPTEMBER 25, 1990

Date of Award

Stephen C. Smith, CIH, CSP, CHMM





40 HOUR CERTIFICATION FOR 29 CFR 1910.120, "HAZ-MAT TRAINING"

Instructor

Date January 18, 1991

Director of Eraining

SS # 129-66-0626







New Jersey / New York Hazardous Materials Worker Training Center

(Partially supported by the National Institute of Environmental Health Sciences)

This is to certify that

Larry McTiernan

Certificate #: UMD 200313

has successfully completed the course entitled

Supervisors of Hazardous Waste Operations 8 Hours

conducted by the

Division of Consumer Health Education
Department of Environmental and Community Medicine
University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School



Gudee K Stack
Center Director

Date

Course Director



CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

LAWRENCE McTIERNAN

has successfully completed an 8-hour course of instruction in OSHA 29 CFR 1910.120

HAZARDOUS WASTE REFRESHER TRAINING

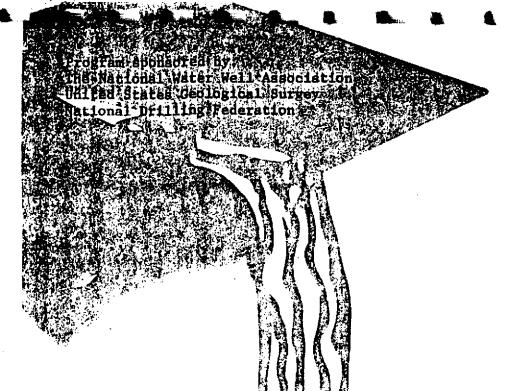
prepared and conducted by

ROUX ASSOCIATES INC

JANUARY 21, 1991

Date of Award

Stephen C. Smith, CIH, CSP, CHMM



Certificate of Achievement

The National Water Well Association recognizes

DIANE MILLER

for completion of all requirements for

Safety at Hazardous Materials Sites: A Hands-On Workshop

October 16-20, 1989 (Date of Course)

40 hours - 29 CFR 1910,120(e)(2)

CEU's - 3.7

Valhalla, New York (Place of Course)

(Signature

CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

HEIDI B. MILLER

has successfully completed an 8-hour course of instruction in OSHA 29 CFR 1910.120

HAZARDOUS WASTE REFRESHER TRAINING

prepared and conducted by

ROUX ASSOCIATES INC

OCTOBER 26, 1990

Date of Award

Stephen C. Smith, CIH, CSP, CHMM

	HEIDI	MILLER	
•			raining Requirements Operations Standard
-p		1910.120)	
Retrotating Date _	11/13/90	-Y	
Health & Safety M	onoger	kund	Jours
encr	·	APR SIZE APR SIZE	<u>\$</u>
	-	DI MILLE	TR
Specified b	129 C	zaidous Wash FR 1910.120	e Operations Standard
DateM	lay 12, 19	89. <u>/</u>)
Health & Salety	Manager —	Kind	owers
entr) •		



Certificate of Completion

Presented To

Bill Sarni

In Recognition of Having Successfully Completed
the Prescribed Course of Study for
Hazardous Maste Site Activities
40-Hour Initial

Mealth and Safety Training

Corporate Safety Manager

Geraghty & Miller, Inc.



This Certificate is awarded to

JOHN C. SHEEHAN

for attendance and participation in

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES
29 CFR 1910.120 (E)(2) - 40 HOURS JUNE 10, 1988

A Community Service Program

Steven P. Muslamley
SENIOR INSTRUCTOR

DEAN OF COMMUNITY SERVICES

James bl. lameis

Columbia-Greene Community College Certificate of Achievement Certificate of Achievement

This Certificate is awarded to

JOHN C. SHEEHAN

for attendance and participation in

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(4) - 8 HOURS OCTOBER 4, 1989

A Community Service Program

live P. Marlangly

Dean of Community Services

Certificate of Training

This is to certify that

JOHN C. SHEEHAN

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

Attested to this 18TH day of SEPTEMBER 19 89

In Cooperation with
The Westchester County NY Fire Training Center

Steve P Murfauley
Instructor

ROUX ASSOCIATES INC.

Sponsoring Organization





CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

STEPHEN C. SMITH

has successfully completed a 40 hour course of instruction in OSHA 29 CFR 1910.120

HAZARDOUS WASTE HEALTH AND SAFETY TRAINING

prepared and conducted by the NUS Corporation, Pittsburgh, Pennsylvania

OCTOBER 10 - 14, 1988

Date of Award

Richard C. Gerlach, Ph.D., C.I.H. Program Manager, Health Sciences, Waste Management Services Group

Rubal (be al

David P. Bour Vice President - General Manager Central Business Operations



CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

STEPHEN C. SMITH

has successfully completed a 8 hour course of instruction in OSHA 29CFR 1910.120

HAZARDOUS WASTE SUPERVISOR TRAINING

prepared and conducted by the NUS Corporation Pittsburgh, Pennsylvania

OCTOBER 15, 1988
Date of Award

Rutal Cherlal

Richard Gerlach, Ph.D., CIH
Program Manager, Health Sciences

David P. Bour

Vice President - General Manager Central Business Operations

Remtech, Inc.

HAZARDOUS WASTE ENGINEERS

CERTIFICATE OF COURSE COMPLETION

awarded to

STEPHEN C. SMITH

for

8 - HOUR HAZARDOUS WASTE SITE OPERATIONS HEALTH & SAFETY TRAINING

THIS TWENTY SEVENTH DAY OF OCTOBER 1989

MARK D. RYCKMAN, P.E., DEE COURSE COORDINATOR

Certificate of Completion

for

Basic Field Training

Awarded To

Martha Smith

this 16 and day of May , 1935

Phoenix Safety Associates, LTD.

Anthony Grands
President

Instructor

Certificate of Completion

for

Advanced Training

Awarded To

Martha Smith

this 16th day of _______, 19.85_

Phoenix Safety Associates, LTD.

Anthony Others Olo
Plesident

Jenene a. Hannen Instructor

Certificate of Training

This is to certify that

MARTH M. SMITH

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

Attested to this 18TH day of september 19 89

In Cooperation with
The Westchester County NY Fire Training Center

Steve P. Marfanoley Instructor

ROUX ASSOCIATES, INC.

Sponsoring Organization

CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

MARTHA M. SMITH

has successfully completed an 8-hour course of instruction in

OSHA 29 CFR 1910.120

HAZARDOUS WASTE SUPERVISOR TRAINING

prepared and conducted by

ROUX ASSOCIATES INC

JANUARY 22, 1991

Date of Award

Stephen C. Smith, CIH, CSP, CHMM Corporate Health & Safety Manager



CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

MARTHA M. SMITH

has successfully completed an 8-hour course of instruction in OSHA 29 CFR 1910.120

HAZARDOUS WASTE REFRESHER TRAINING

prepared and conducted by

ROUX ASSOCIATES INC

JANUARY 21, 1991

Date of Award

Stephen C. Smith, CIH, CSP, CHMM

Certificate

This is to certify that

BRAIN THOMAS

is bereby awarded this Certificate signifying

the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES

29 CFR 1910.120 (e) (2) 40 HOURS

Attested to this _6 ___ day of __APRIL____19 _87_

- Tree 12 Minimus

of Training

Certificate of Training

This is to certify that BRIAN J. THOMAS

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

Attested to this 18TH day of SEPTEMBER 19 19

In Cooperation with
The Westchester County NY Fire Training Center

Steven P. Mar Samly Instructor

ROUX ASSOCIATES, INC.

Sponsoring Organization

Columbia-Greene Community College Certificate of Achievement

This Certificate is awarded to

BRIAN J. THOMAS

for attendance and participation in

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(4) - 8 HOURS OCTOBER 4, 1989

A Community Service Program

Senior Instructor

JAMES R. CAMPION
Dean of Community Services



THIS CERTIFIES THAT

BRIAN THOMAS

has successfully completed an 8-hour course of instruction in OSHA 29 CFR 1910.120
HAZARDOUS WASTE REFRESHER TRAINING

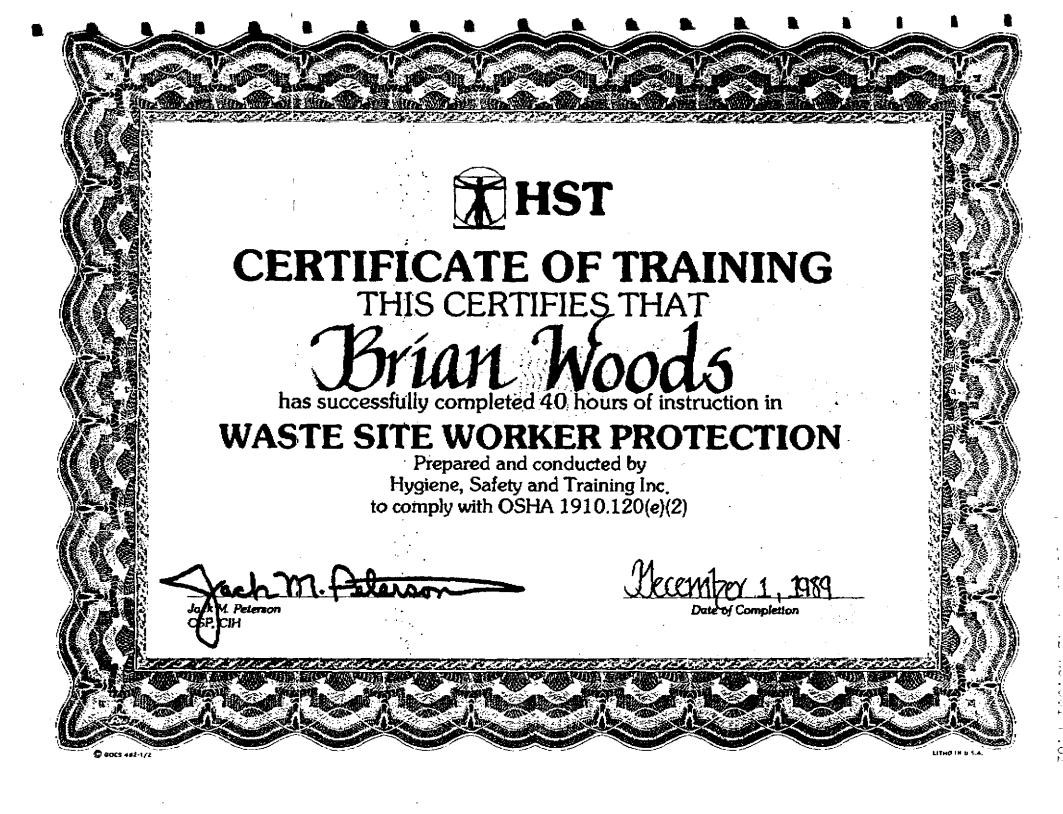
prepared and conducted by

ROUX ASSOCIATES INC

SEPTEMBER 24, 1990

Date of Award

Stephen C. Smith, CIH, CSP, CHMM Corporate Health & Safety Manager





New Jersey / New York Hazardous Materials Worker Training Center

(Partially supported by the National Institute of Environmental Health Sciences)

This is to certify that

Brian Woods

Certificate #: UMD 200322

has successfully completed the course entitled.

Supervisors of Hazardous Waste Operations 8 Hours

conducted by the

Division of Consumer Health Education

Department of Environmental and Community Medicine

University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School



August 29, 1990

Date

Course Director

Center Director

Sep. 7,

CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

BRIAN WOODS

has successfully completed an 8-hour course of instruction in
OSHA 29 CFR 1910.120
HAZARDOUS WASTE REFRESHER TRAINING
prepared and conducted by
ROUX ASSOCIATES INC

JANUARY 21, 1991

Date of Award

Stephen C. Smith, CIH, CSP, CHMM Corporate Health & Safety Manager

Certificate

This is to certify that

JOANNE M. YEARY

is bereby awarded this Certificate signifying

the successful completion of

HEALTH & BAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES

29 CFB 1910.120 (e) (2) 40 HOURS

Attested to this & day of ADDIT 19 97

Commy Executive Wash

Instructor

Commy Executive Wash

Commy Freeding Commy Free Coordinator

of Training

Certificate of Training

This is to certify that

JOANNE YEARY

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

Attested to this 18TH day of SEPTEMBER 19 89

In Cooperation with The Westchester County NY Fire Training Center

Stive P. Martourly Instructor

ROUX ASSOCIATES, INC.

Sponsoring Organization

Columbia-Greene Community College Certificate of Achievement Certificate of Achievement

This Certificate is awarded to

JOANNE M. YEARY

for attendance and participation in

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(4) - 8 HOURS OCTOBER 4, 1989

A Community Service Program

Utre P. Mustande Senior Instructor

Dean of Community Services

PERSONNEL PROTECTION AND SAFETY TRAINING **FOR** HAZARDOUS WASTE SITE ACTIVITIES

Roger E. Bronnenkant

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910 and SARA section 126(d).

NORMANDEAU ASSOCIATES INC. **ENVIRONMENTAL CONSULTANTS** a unit of THERMO WATER MANAGEMENT, INC.

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick C. Clark
Signature

9 March 1980

NORMANDEAU ASSOCIATES! M(b)021 noted ATAS bas OPEN FILLO CE DISTANCO MIN SOUSIIGMOO NI SHUMUONELSYMSNOTHYZYHUI OSINOS INOU OF This is to certify the above interior is a competed the MESTICOPPORTS, STATERON TO SELLIVITO NETTE ETTE AN STOUTH AND THE

THE COURSE OF THE PARTY OF THE

SNINITE IN LEGISLATION

HASHUA HOAD, SEED FORD, HE OF

PERSONNEL PROTECTIO

PERSONNEL PROTECTION AND SAFETY TRAINING *FOR* HAZARDOUS WASTE SITE ACTIVITIES

Lee E. Carbonneau

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910 and SARA section 126(d).

NORMANDEAU ASSOCIATES INC. **ENVIRONMENTAL CONSULTANTS** a unit of THERMO WATER MANAGEMENT, INC.

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick C. Clark Signature 17 November 1989

PERSONNEL PROTECTION AND SAFETY FOR HAZARDOUS WASTE SITE ACTIVITIES REFRESHER TRAINING

Lee Carbonneau

This is to certify the above named has completed the 8 hour Refresher Course in HAZARDOUS WASTE SITE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910. 120e (8).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS Patrick C. Clark Signature

26 January 1991

PERSONNEL PROTECTION AND SAFETY TRAINING **FOR** HAZARDOUS WASTE SITE ACTIVITIES

Mary T. Gaudette

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910 and SARA section 126(d).

NORMANDEAU ASSOCIATES INC. **ENVIRONMENTAL CONSULTANTS** a unit of THERMO WATER MANAGEMENT.INC.

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick C. Clark Signature
17 November 1989

PERSONNEL PROTECTION AND SAFETY FOR HAZARDOUS WASTE SITE ACTIVITIES REFRESHER TRAINING

Mary T. Gaudette

This is to certify the above named has completed the 8 hour Refresher Course in HAZARDOUS WASTE SITE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910. 120e (8).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick C. Clark

Signature

26 January 1991

PERSONNEL PROTECTION AND SAFETY TRAINING FOR HAZARDOUS WASTE SITE ACTIVITIES

John P. Grasso Jr.

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910 and SARA section 126(d).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS a unit of THERMO WATER MANAGEMENT, INC.

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick C. Carle
Signature

9 March (990

Date

PERSONNEL PROTECTION AND SAFETY TRAINING **FOR** HAZARDOUS WASTE SITE ACTIVITIES

Robert Gustafson

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910 and SARA section 126(d).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS a unit of THERMO WATER MANAGEMENT, INC.

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick Clark Signature 9 March 1990

Date

PERSONNEL PROTECTION AND SAFETY FOR HAZARDOUS WASTE SITE ACTIVITIES REFRESHER TRAINING

Robert Hasevlat

This is to certify the above named has completed the 8 hour Refresher Course in HAZARDOUS WASTE SITE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910. 120e (8).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS Patrick C. Clark
Signature

26 January 1991 Date



New Jersey / New York Hazardous Materials Worker Training Center

(Partially supported by the National Institute of Environmental Health Sciences)

This is to certify that

Robert Hasevlat

Certificate #: UMD 200366

has successfully completed the course entitled

Supervisors of Hazardous Waste Operations 8 Hours

conducted by the

Division of Consumer Health Education
Department of Environmental and Community Medicine
University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School



November 15, 1990

Date

Course Director

auber L. Galas.

Center Director

PERSONNEL PROTECTION AND SAFETY TRAINING FOR HAZARDOUS WASTE SITE ACTIVITIES

George D. Hegerich

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910 and SARA section 126(d).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS a unit of THERMO WATER MANAGEMENT, INC.

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick C. Clark
Signature

9 March 1990

Date

PERSONNEL PROTECTION AND SAFETY TRAINING **FOR** HAZARDOUS WASTE SITE ACTIVITIES

Felice H. Janelle

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910 and SARA section 126(d).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS a unit of THERMO WATER MANAGEMENT.INC.

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick C. Clark Signature

9. March 1980

PERSONNEL PROTECTION AND SAFETY TRAINING FOR HAZARDOUS WASTE SITE ACTIVITIES

Bill MacKenzie

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910 and SARA section 126(d).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS a unit of THERMO WATER MANAGEMENT, INC.

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick C Clark
Signature

9 March 1990

PERSONNEL PROTECTION AND SAFETY TRAINING **FOR** HAZARDOUS WASTE SITE ACTIVITIES

John G. MacNeill

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910 and SARA section 126(d).

NORMANDEAU ASSOCIATES INC. **ENVIRONMENTAL CONSULTANTS** a unit of THERMO WATER MANAGEMENT, INC.

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick C. Clark
Signature

9 March 1990

Date



Certificate of Training

THIS CERTIFIES THAT

Don Mason

has successfully completed a course of instruction in

HAZARDOUS MATERIAL HANDLING

prepared and conducted by the NUS Corporation, Pittsburgh, Pennsylvania

MAY 21 - MAY 25, 1984

Gary P. Smith, C.S.P. Manager, Health & Safety

E. Dennis Escher, P. E.

Vice President



WASTE MANAGEMENT SERVICES GROUP

PARK WEST TWO CLIFF MINE ROAD PITTSBURGH, PA 15275-1071 [412] 788-1080

November 8, 1989

Mr. Don Mason Normandeau Associates 25 Nashua Road Bedford, New Hampshire 03102

As per your request, this letter is to verify that Don Mason successfully completed the NUS Health and Safety training course on hazardous materials operations during the week of May 28 - June 1, 1984. Contents of this course have been developed to meet the training requirements of OSHA Standard 29 CFR 1910.120 on Hazardous Waste Operations and Emergency Response; Interim Final Rule.

Very truly yours,

Kathleen S. Brady

Project Manager, Training

KSB/mma

PERSONNEL PROTECTION AND SAFETY FOR HAZARDOUS WASTE SITE ACTIVITIES REFRESHER TRAINING

Donald P. Mason

This is to certify the above named has completed the 8 hour Refresher Course in HAZARDOUS WASTE SITE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910. 120e (8).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS <u> Matriels C. Clark</u> Signature

26 Jenuary 1991

FOR HAZARDOUS WASTE SITE ACTIVITIES REFRESHER TRAINING

Donald P. Mason

This is to certify the above named has completed the 8 hour Refresher Course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910, 120e (8).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS a unit of THERMO WATER MANAGEMENT, INC.

25 NASHUA ROAD, BEDFORD, NH 03102

Patrick C. Clark
Signature

17 November 1989 Date

PERSONNEL PROTECTION AND SAFETY FOR HAZARDOUS WASTE SITE ACTIVITIES REFRESHER TRAINING

Joseph E. Payne

This is to certify the above named has completed the 8 hour Refresher Course in HAZARDOUS WASTE SITE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910. 120e (8).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS

Signature

1991

PERSONNEL PROTECTION AND SAFETY TRAINING FOR HAZARDOUS WASTE SITE ACTIVITIES

Chester R. Porembski

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE SITE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910. 120 (e) and SARA section 126(d).

NORMANDEAU ASSOCIATES INC.

Patrick C. Clark
Signature

26 January 1991.

PERSONNEL PROTECTION AND SAFETY FOR HAZARDOUS WASTE SITE ACTIVITIES REFRESHER TRAINING

Kent E. Snyder

This is to certify the above named has completed the 8 hour Refresher Course in HAZARDOUS WASTE SITE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910. 120e (8).

NORMANDEAU ASSOCIATES INC. ENVIRONMENTAL CONSULTANTS <u>Patrick C. Clark</u> Signature

26 January 1991

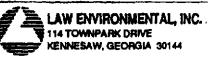
PERSONNEL PROTECTION AND SAFETY TRAINING *FOR* HAZARDOUS WASTE SITE ACTIVITIES

Craig A. Wood

This is to certify the above named has completed the 40 hour course in HAZARDOUS WASTE ACTIVITIES in compliance with OSHA Standard 29 CFR 1910 and SARA section 126(d).

NORMANDEAU ASSOCIATES INC. **ENVIRONMENTAL CONSULTANTS** a unit of THERMO WATER MANAGEMENT.INC.



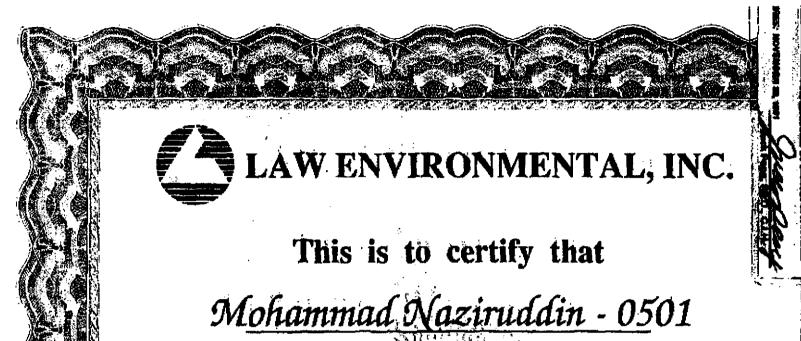


ELIZABETH KREML - 0500

HAS SUCCESSPULLY COMPLETED THE 40-HOUR COURSE "HEALTH & SAPETY FOR HAZARDOUS WASTE OPERATIONS" AS REQUIRED BY OSHIA 28 CFR 1910.120

EXPIRES: NOVEMBER 30, 1991

Clack Peng, PM.D., C.I.H.



has successfully completed the 40 - hour course "Health & Safety for Hazardous Waste Operations" as required by OSHA 29 CFR 1910.120 on

November 30, 1990

Melisa De Franks, M.S.P.H.

David Matthews C.L.H.



325 Wood Road Braintree, MA 02184

Certificate of Training

Jim Ash

This is to certify that_

has successfully completed the Clean Harbors Training Program

on Personnel Protection and Safety for Hazardous Waste Site Operations

Forty Hour OSHA 29 CFR 1910.120

CLEAN HARBORS

environmental services companies

November 11, 1988



THIS CERTIFIES THAT

JOHN BOWEN

has successfully completed 40 hours of instruction in

HAZARDOUS WASTE OPERATIONS

prepared and conducted by the NUS Corporation, Pittsburgh, Pennsylvania

June 22-26, 1987

Date of Award

Gary F. Smith, C.S.P. Program Manager, Health Sciences

William M. Smith Director Of Industrial Programs

tern Smith



THIS CERTIFIES THAT

GEORGE BURNS

has successfully completed a 40 hour course of instruction in

HAZARDOUS MATERIALS HANDLING

prepared and conducted by the NUS Corporation,
Pittsburgh, Pennsylvania

MARCH 7-11, 1988

Date of Award

Richard C. Gerlach, Ph.D. C.I.H.

Program Manager, Health Sciences

Rulad (Gel

David P. Bour Vice President and General Manager, Central Business Operations



THIS CERTIFIES THAT

MARK BURNS

has successfully completed a 40 hour course of instruction in

HAZARDOUS MATERIALS HANDLING

prepared and conducted by the NUS Corporation,
Pittsburgh, Pennsylvania

MARCH 7-11, 1988

Date of Award

Rubal (Cental

Richard C. Gerlach, Ph.D, C.I.H.
Program Manager, Health Sciences

David P. Bour
Vice President and General Manager,
Central Business Operations

CORPORATE ENVIRONMENTAL ADVISORS, LUDLOW, MASSACHUSETTS Certificate of Training William Burns COSMO INCORPORATED OF NEW ENGLAND 8 Hour Has successfully completed a ____ course in Health & Safety Training Annual Review OSHA 29 CFR 1910.120 March, 1991





THIS CERTIFIES THAT

JOHN A. GRAGLIA

has successfully completed 40 hours of instruction in

HAZARDOUS WASTE OPERATIONS

prepared and conducted by the NUS Corporation, Pittsburgh, Pennsylvania

June 1-5, 1987

Date of Award

Gary F. Smith, C.S.P. Program Manager, Health Sciences

William M. Smith Director Of Industrial Programs

PERSONNEL PROTECTION AND SAFETY TRAINING FOR HAZARDOUS WASTE SITE ACTIVITIES

John A. Graglia

This is to certify the above named has completed the 8 hour annual refresher course in *Hazardous Waste Site Activities* in compliance with *OSHA Standard 29 CFR 1910* and *SARA section 126(d)*.

hm	HMM ASSOCIATES, INC.
	RS, ENVIRONMENTAL CONSULTANTS & PLANNERS
196 Baker	Avenue • Concord • Massachusetts • 01742 • (508) 371-4000

Com	no Hallman
Signature	•
	May 5, 1990
Date	
	5590H001

Certification Number



THIS CERTIFIES THAT

ROBERT L. HAMMOND JR.

has successfully completed a 40 hour course of instruction in

HAZARDOUS MATERIALS HANDLING

prepared and conducted by the NUS Corporation, Pittsburgh, Pennsylvania

MARCH 7-11, 1988

Date of Award

Ruband Coulal

Richard C. Gerlach, Ph.D, C.I.H. Program Manager, Health Sciences David P. Bour Vice President and General Manager, Central Business Operations





325 Wood Road Braintree, MA 02184

Certificate of Training

This is to certify that_

PETER T. LAUNIE

has successfully completed the Clean Harbors Training Program

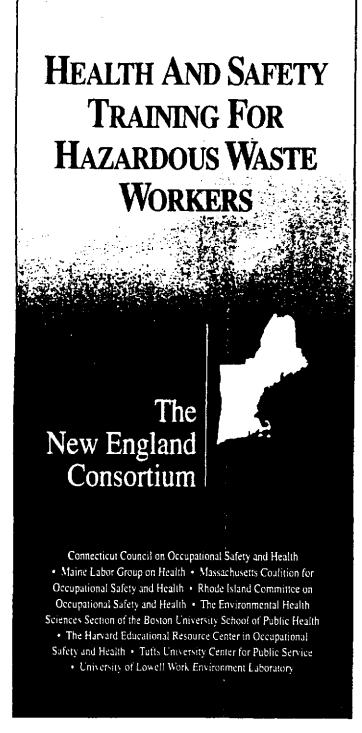
on Personnel Protection and Safety for Hazardous Waste Site Operations

AS REQUIRED BY 29 CFR 1910.120 Rulaid T. Cotter

CLEAN HARBORS
environmental services companies

FEBRUARY 2, 1990

DATE



Training Certificate

This certifies that

Kevin Maher

has completed the

40 hour Hazardous Waste Site Worker Basic Health and Safety Course

on

June 18 - 22, 1990

at

Lowell, Massachusetts

Signed Tom Crowther CIH



CERTIFICATE OF TRAINING

THIS CERTIFIES THAT

JAMES R. MORAN, JR.

has successfully completed 40 hours of instruction in

HAZARDOUS WASTE OPERATIONS

prepared and conducted by the NUS Corporation, Pittsburgh, Pennsylvania

June 1-5, 1987

Date of Award

Gary F. Smith, C.S.P. Program Manager, Health Sciences

William M. Smith **Director Of Industrial Programs**

limbuth

PERSONNEL PROTECTION AND SAFETY TRAINING FOR HAZARDOUS WASTE SITE ACTIVITIES

James R. Moran, Jr.

This is to certify the above named has completed the 8 hour annual refresher course in *Hazardous Waste Site Activities* in compliance with *OSHA Standard 29 CFR 1910* and *SARA section 126(d)*.

hm L	IMM	ASS	OCIA	TES,	INC.
ENGINEERS,					
196 Baker Aver	tue • Conc	ord • Massa	chuselts •	01742 • (5	08) 371-4000

Con	no Gallenaro
Signature	
	May 5, 1990
Date	
	5590H002

Certification Number





Environmental Services Companies

Certificate of Training

This is to certify that DANIEL J. STRICKLAND, JR.

representing D. L. MAHER COMPANY

satisfactorily completed training in

PERSONAL PROTECTION AND SAFETY FOR HAZARDOUS WASTE OPERATIONS

40 HR Program - JUNE 4-JUNE 8, 1990

AS REQUIRED BY 29 CFR 1910.120

Conducted by

CLEAN HARBORS ENVIRONMENTAL TRAINING SPECIALISTS

Dated JUNE 8, 1990

Rule TOAD

Grander of Francisco

Calumbia-Greene Community Callege Cortificate of Achievement Certificate of Achievement

This Certificate is awarded to

CHRIS J. FLYNN

for attendance and participation in

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910, 120 (E)(2) - 40 HOURS JUNE 10, 1988

A Community Service Program

SENIOR INSTRUCTOR

COMMUNITY SERVICES

Certificate of Training

This is to certify that

CHRISTOPHER J. FLYNN

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

Attested to this 2ND day of DECEMBER 19 89

Stive P. Mustanly

H2M GROUP

Sponsoring Organization

Certificate of Training

This is to certify that

GARY J. MILLER, P.E.

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

Attested to this 2ND day of DECEMBER 19 89

Steve P. Mustamely

H2M GROUP

Sponsoring Organization

Certificate

This is to certify that

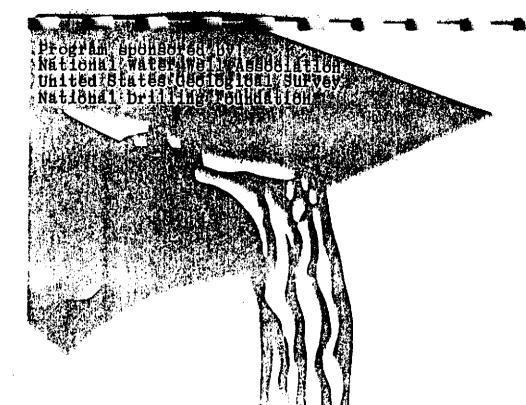
GARY J. MILLER

is bereby awarded this Certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910, 120 (E)(2) 40 HOURS

Attested to this _____ day of ____ FEBRUARY ____ 19 ___ 88

of Training



Certificate of Achievement

The National Water Well Association recognizes

CAROLINE CHOJNOWSKI

for completion of all requirements for

Safety at Hazardous Materials Sites: A Hands-On Workshop

June 10 - 14, 1989 (Date of Course)

Valhalla, New York (Place of Course)

40 hours-29 CFR 1910,120(e)(2)

(Signature)

CEU = 3.7

Certificate of Training

This is to certify that

CAROLINE CHOJNOWSKI

is hereby awarded this certificate signifying the successful completion of

HEALTH & SAFETY OPERATIONS AT HAZARDOUS MATERIALS SITES 29 CFR 1910.120 (e)(8) - REFRESHER TRAINING - 8 HOURS

Attested to this 2ND day of DECEMBER 19 89

Steven P. Markansky

H2M GROUP

Sponsoring Organization



HEALTH & SAFETY CERTIFICATION

Geo Logic, Inc. acknowledges that it has read, understands, and has made available to its employees copies of 29 CFR 1910.120, 29 CFR 1910.134, and the provisions of American National Standards Institute Standard Z88.2 and Z88.6 for respiratory protection. Geo Logic, Inc. hereby certifies that the employees who will be engaged in working on or near the Industri-Plex Site, in Woburn, Massachusetts will meet the provisions of the above documents. Geo Logic, Inc. certifies that the employees listed below who may be working at the project site, meet the provisions of the above documents for work on hazardous waste sites. These requirements include, but are not limited to, the following items:

- A. Geo Logic, Inc. employees are enrolled in a medical surveillance program. Each has been determined to be physically able to perform their duties, and to use the respiratory and other protective equipment required for this assignment.
- B. Geo Logic, Inc. employees have attended 40 hours of formal hazardous waste safety training as required by 29 CFR 1910.120 and annually attend an 8 hour refresher course.
- C. Geo Logic, Inc. employees have been trained in the proper use of respirators and their limitations and is maintaining a respiratory protection program that complies with the provisions of 29 CFR 1910.134.
- D. Geo Logic, Inc. has established and is maintaining a Health and Safety Program that complies with the provisions of 29 CFR 1910.120.

Employees: Deborah Q. Arey SS#: 023-54-8743 David L. Arquette 383-76-9164 Peter J. Canning 035-36-7997 John P. Galvin 030-56-6498 Anthony G. Martinelli 035-54-3093 Thomas J. Paquette 014-34-1946 Hamilton A. Workman 033-44-9973

ACKNOWLEDGED AND APPROVED:

Geo Lo	gic, Anc.	
By:	Neborah & aren	
Title:	Health + Safety Office	۷_
Date:	3/30/90	





Personnel Protection and Safety Training for Hazardous Waste Site Activities

This certifies that

DAVID L. ARQUETTE

Has Successfully Completed an 8 Hour Refresher Course for Hazardous Waste Activities in compliance with OSHA Standard 29 CFR 1910.

Deborah Q. Arey

Environmental Engineer

Health & Safety Coordinator

October 30, 1989

Date Completed

Watertown, Massachusetts Location



Personnel Protection and Safety Training for Hazardous Waste Site Activities

This certifies that

DEBORAH Q. AREY

Has Successfully Completed a 40 Hour Hazardous Waste Safety Training Course in compliance with OSHA Standard 29 CFR 1910. This training was completed at Texas Instruments January 15, 1987.

Has also Successfully Completed an 8 Hour Refresher Course performed by Geo Logic on January 20, 1990 in Watertown, Massachusetts.

Canning Peter U

President

Field Coordinator

EARTH
EXPLORATION
SERVICES

Certificate of Completion

Personnel Protection and Safety Training for Hazardous Waste Site Activities

This certifies that

WILLIAM F. CROWLEY

Has Successfully Completed an 8 Hour Refresher Course for Hazardous Waste Activities in compliance with OSHA Standard 29 CFR 1910.

Deborah Q. Arey

Environmental Engineer

Health & Safety Coordinator

October 30, 1989

Date Completed

Watertown, Massachusetts
Location

National Water Well Association

CERTIFIES

WILLIAM F. CROWLEY # 3558

IN THE FOLLOWING CATEGORIES

M

GOOD THRU

12/31/88



National Water Well Association

CERTIFIES

William F. Crowley, CWD

#3558

IN THE FOLLOWING CATEGORIES

M

GOOD THRU 12/90



PERSONNEL PROTECTION AND SAFETY
FOR HAZARDOUS WASTE SITE ACTIVITIES

in accordance with training requirements exhibited by OSHA regulation 29 CFR Part 1910.120 (e) and Section 126 (d) at the Euperfund

mandand Adamharization Act (BARA) of 1988, th

Facilities/40 (Hazklet) hours of training and has notice three days under the direct expension of a Marked and expensions expensions. TATETERS M. CONTAIL RV

WILLIAM F CROWLEY
Tank Tester/Driller

Braintree, MA (CHIEE)

Omphance Training Manager

1/29/88



CENTER FOR ENVIRONMENTAL MANAGEMENT

Division of Education and Training

This is to certify that

Peter J. Flink

has successfully completed course requirements in

Hazardous Waste General Site Worker Training

8912-02-002

Certificate Number

December 4 - 8, 1989

Course Date

December 8, 1989

Examination Date

December 8, 1990

Expiration Date

WERSITATION 1852 IEAG

Associate Director for Education and Training

Director

Center for Environmental Management



Personnel Protection and Safety Training for Hazardous Waste Site Activities

This certifies that

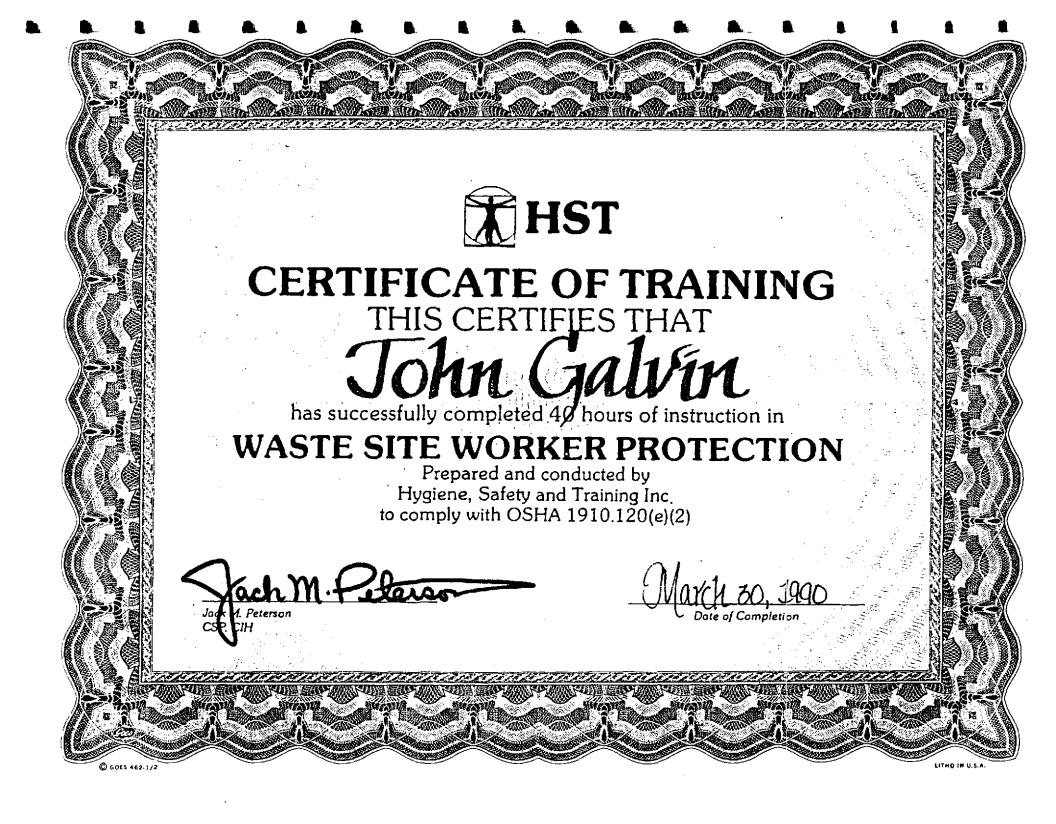
JOHN P. GALVIN

Has Successfully Completed a 40 Hour Hazardous Waste Safety Training Course in compliance with OSHA Standard 29 CFR 1910. This training was performed March 26 through March 30, 1990 by Hygiene, Safety and Training, Inc. in South Portland Maine.

Deborah Q. Arey

Environmental Engineer

Health & Safety Coordinator





Personnel Protection and Safety Training for Hazardous Waste Site Activities

This certifies that

ANTHONY G. MARTINELLI

Has Successfully Completed an 8 Hour Refresher Course for Hazardous Waste Activities in compliance with OSHA Standard 29 CFR 1910.

Deborah Q. Arey

Environmental Engineer

Health & Safety Coordinator

October 30, 1989

Date Completed

Watertown, Massachusetts Location

Anthony completed the 40 hour Hazardous Waste Safety Trainging Course performed by Thomas E. Hamilton, CIH of GHR Engineering Associates, Inc. in January 1989.



PRESENTED TO JOHN Martinelli

FOR SUCCESSFUL COMPLETION OF A 40-HOUR TRAINING PROGRAM IN HEALTH AND SAFETY, WHICH MEETS OSHA REQUIREMENTS UNDER CFR 1910.120 FOR HAZARDOUS WASTE OPERATIONS.

COURSE GIVEN BY GHR ENGINEERING ASSOCIATES, INC.

January 21 1989



THOMAS E. HAMILTON, CIH

COURSE DIRECTOR

HEALTH & SAFETY DIRECTOR

GHR ENGINEERING

RICHARD J. BHEALIME, P.E.

PRESIDENT

GHR ENGINEERING

GHR ENGINEERING ASSOCIATES, INC., 75 TARKILN HILL ROAD, NEW BEDFORD, MASSACHUSETTS 02745 617-995-5136



Personnel Protection and Safety Training for Hazardous Waste Site Activities

This certifies that

STEVEN J. MATEUS

Has Successfully Completed a 40 Hour Hazardous Waste Safety Training Course in compliance with OSHA Standard 29 CFR 1910. This training was performed June 5th through June 9, 1989 by K-V Associates, Inc., Falmouth, Massachusetts.

Deborah Q. Arey

Environmental Engineer

Health & Safety Coordinator



HEALTH, SAFETY AND ENVIRONMENTAL TRAINING PROGRAM

This Certifies That	
	Thomas J. Paquette
Has Successfully Completed 40 Hour Health a	and Safety Training Course For Hazardous Waste Operations.
Service and the service and th	
Date <u>June 25, 1988</u>	_ Location Sturbridge, Massachusetts
est.	BRUCE D. GROVES, CIH Course Director



Personnel Protection and Safety Training for Hazardous Waste Site Activities

This certifies that

HEIDI STOLLE RESCA

Has Successfully Completed an 8 Hour Refresher Course for Hazardous Waste Activities in compliance with OSHA Standard 29 CFR 1910.

Deborah Q. Arey
Environmental Engineer
Health & Safety Coordinator

January 20, 1990

Date Completed

Watertown, Massachusetts

Location

Note: Heidi completed the 40 hour Hazardous Waste Safety Trainging Course performed by HMM Associates, Inc. in January 1988.





Personnel Protection and Safety Training for Hazardous Waste Site Activities

This certifies that

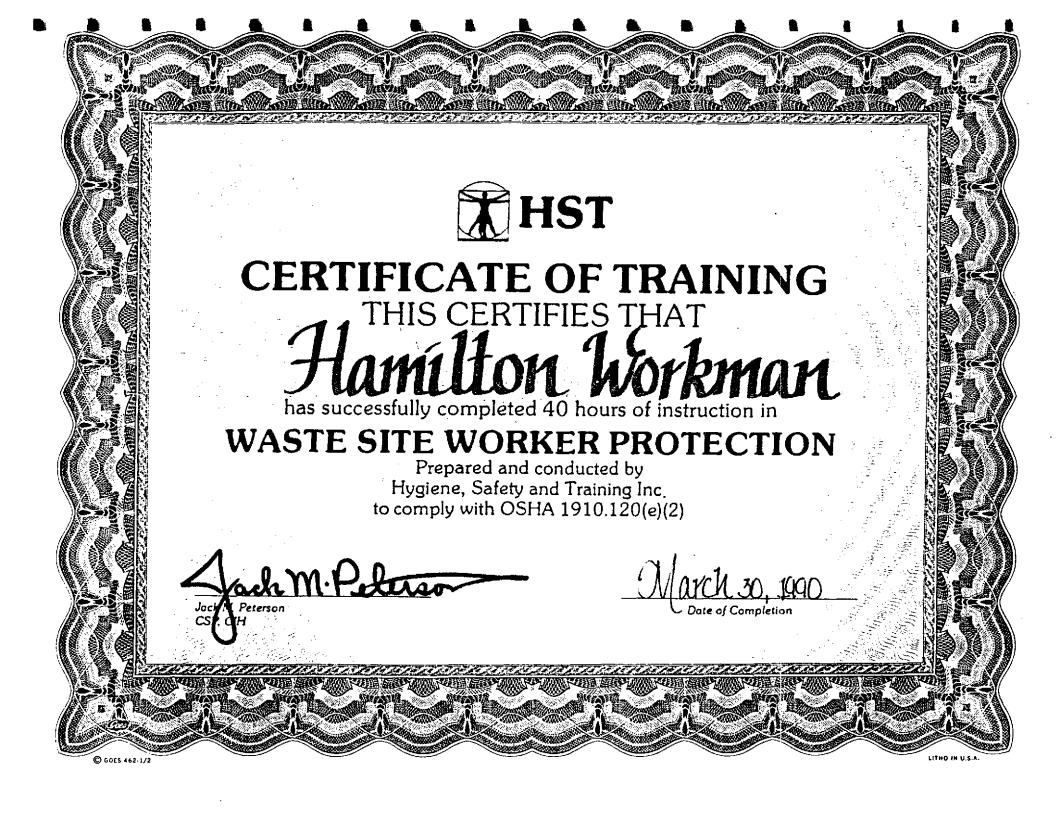
HAMILTON A. WORKMAN

Has Successfully Completed a 40 Hour Hazardous Waste Safety Training Course in compliance with OSHA Standard 29 CFR 1910. This training was performed March 26 through March 30, 1990 by Hygiene, Safety and Training, Inc. in South Portland Maine.

Deborah Q. Arey

Environmental Engineer

Health & Safety Coordinator





PRESENTED TO JOEY L. BANNER
FOR SUCCESSFUL COMPLETION OF A 40-HOUR TRAINING PROGRAM IN HEALTH AND
SAFETY, WHICH MEETS OSHA REQUIREMENTS UNDER CFR 1910,120 FOR HAZARDOUS
WASTE OPERATIONS.
COURSE GIVEN BY GHR ENGINEERING ASSOCIATES, INC.
January 27 1988

FRANK B. STEVENSON, P.E. HEALTH & SAFETY DIRECTOR

GHR ENGINEERING

RICHARD J. RHEAUME, P.E.

PRESIDENT

GHR ENGINEERING

GHR ENGINEERING ASSOCIATES, INC., 109 RHODE ISLAND ROAD, LAKEVILLE, MASSACHUSETTS 02347 508-946-0700



PRESENTED TOSEAN_LEACH
FOR SUCCESSFUL COMPLETION OF A 40-HOUR TRAINING PROGRAM IN HEALTH AND
SAFETY, WHICH MEETS OSHA REQUIREMENTS UNDER CFR 1910.120 FOR HAZARDOUS
WASTE OPERATIONS.
COURSE GIVEN BY GHR ENGINEERING ASSOCIATES, INC.
January 27, 19 88

FRANK B. STEVENSON, P.E.
HEALTH & SAFETY DIRECTOR
GHR ENGINEERING

RICHARD J. RHEAUNE, P.E

PRESIDENT

GHR ENGINEERING

GHR ENGINEERING ASSOCIATES, INC., 109 RHODE ISLAND ROAD, LAKEVILLE, MASSACHUSETTS 02347 508-946-0700



PRESENTED TO James Carson

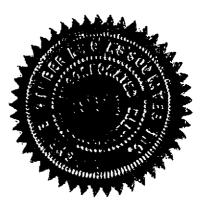
FOR SUCCESSFUL COMPLETION OF A 40-HOUR TRAINING PROGRAM IN HEALTH AND

SAFETY, WHICH MEETS OSHA REQUIREMENTS UNDER CFR 1910.120 FOR HAZARDOUS

WASTE OPERATIONS.

COURSE GIVEN BY GHR ENGINEERING ASSOCIATES, INC.

December 21 19.87



THOMAS E. HAMILTON, CIH

COURSE DIRECTOR

HEALTH & SAFETY DIRECTOR

GHR ENGINEERING

RICHARD J. RHEAUME, P.E.

PRESIDENT

GHR ENGINEERING

GHR ENGINEERING ASSOCIATES, INC., 75 TARKILN HILL ROAD, NEW BEDFORD, MASSACHUSETTS 02745 617-995-5136



PRESENTED TO STEVEN PIMENTAL
FOR SUCCESSFUL COMPLETION OF A 40-HOUR TRAINING PROGRAM IN HEALTH AND
SAFETY, WHICH MEETS OSHA REQUIREMENTS UNDER CFR 1910.120 FOR HAZARDOUS
WASTE OPERATIONS.
COURSE GIVEN BY GHR ENGINEERING ASSOCIATES, INC.
June_22,1987_

FRANK B. STEVENSON, P.E. HEALTH & SAFETY DIRECTOR GHR ENGINEERING

RICHARD J. RHEAUME, P.E. PRESIDENT

GHR ENGINEERING

GHR ENGINEERING ASSOCIATES, INC., 109 RHODE ISLAND ROAD, LAKEVILLE, MASSACHUSETTS 02347 508-946-0700



Presented To

Harold Jensen September 18-22,1989

In Recognition of Having Successfully Completed
the Prescribed Course of Study for
Hazardous Maste Site Activities
40-Hour Initial
Health and Safety Training

andrew J. Bucher

Corporate Safety Manager Geraghty & Miller, Inc. Hering Trusty

Regional Health and Safety Manager Geraghty & Miller, Inc.

HEALTH AND SAFETY TRAINING FOR HAZARDOUS WASTE WORKERS

The New England Consortium

Connecticut Council on Occupational Safety and Health

Maine Labor Group on Health

Massachusells Coalition for Occupational Safety and Health

Rhode Island Commillee on Occupational Safety and Health

The Environmental Health

Sciences Section of the Boslon University School of Public Health

The Harvard Educational Resource Center in Occupational Safety and Health

Tufts University Center for Public Service

University of Lowell Work Environment Laboratory

Training Certificate

Number 01665
This certifies that

Steven Falzarano

has completed the

40 hour Hazardous Waste Site Worker Basic Health and Safety Course

on

January 8-12, 1990

at

Lowell, Massachusetts

Signed.

Course Coordinator

APPENDIX 2-2

Health and Safety Briefing Records

Golder Associates	inc. HEALTH AND	SAFETY PLAN	Page <u>9 of 10</u> Rev. No. <u>0</u>
0. Special instructions			
1. Notify Site	Operations Manager (Chri	s Devine) of schedu	ile.
·	out with security guard	each day	
3. Consult the (Golder Associates Health	and Safety Plan fo	r additional
information.			
· · · · · · · · · · · · · · · · · · ·			
			<u> </u>
			
			·
			· · · · · · · · · · · · · · · · · · ·
		· · · · · · · · · · · · · · · · · · ·	
· · · · · · · · · · · · · · · · · · ·			,
1. Selety Briefing			1.600
The following personnel w	rere present at a pre-job safety t		
The following personnel won_1-21-90 (date)	at ISRT Site Trail		
The following personnel won_1-21-90 (date) plan and are familiar with Nam	at <u>ISRT SIHE Trails</u> Its provisions. ne :		ure
The following personnel won 1-21-90 (date)	at <u>ISRT SIHE Trails</u> Its provisions. ne :	(location), ar	nd have read the abov
The following personnel won 1-21-90 (date) plan and are familiar with Nam	at <u>ISRT SIHE Trails</u> Its provisions. ne :	(location), ar	ure
The following personnel won 1-21-90 (date) plan and are familiar with Nam Nam C. Rour	at <u>ISRT SHE Trails</u> Its provisions. ne	(location), ar	ure
The following personnel won 1-21-90 (date) plan and are familiar with Nan Nary C. Rour BILL BINGHAM LARE Z arens k	at ISRT SHE Trails Its provisions. The ciec	(location), ar Mary Signat	Bouncie
The following personnel won 1-21-90 (date) plan and are familiar with Nam Nary C. Rour SILL BINGHAM: We Zarens k	at ISRT SHE Trails Its provisions. The ciec	(location), ar Mary Signat	ure
The following personnel won 1-21-90 (date) plen and are familiar with Nam Nary C. Rouce BILL BINGHAM LA Z acens ke Patrick A. Consider	at ISRT SHE Trails Its provisions. The ciec	(location), ar Mary Signat	Bouncie
The following personnel won 1-21-90 (date) plan and are familiar with Nam	at ISRT SHE Trails Its provisions. The ciec	(location), ar Mary Signat	Bouncie
The following personnel won 1-21-90 (date) plen and are familiar with Nam Nary C. Rour BILL BINGHAM The Zarens k Patrick A. Consider	at ISRT SHE Trails Its provisions. The ciec	(location), ar Mary Signat	Bource
The following personnel won 1-21-90 (date) plen and are familiar with Nam Namy C. Rough BILL BINGHAM The Zarens ke Patrick A. Consider	at ISRT SHE Trails Its provisions. The ciec	(location), ar Mary Signat	Bource
The following personnel won 1-21-90 (date) plen and are familiar with Nam Nary C. Rour BILL BINGHAM The Zarens k Patrick A. Consider	at ISRT SHE Trails Its provisions. The ciec	(location), ar Mary Signat	Have read the abo
The following personnel won 1-21-90 (date) plan and are familiar with Nam Nary C. Rour PILL BINGHAM Whe Zarens W PATRICK A. Consider	at ISRT SHE Trails Its provisions. The ciec	Mary Signal Mary . Ma	Bouncie

J. Edmund Baker

Printed Name of Project Manager

Signature Date

(29)	Golder	Associates	Inc
			• • • •

HEALTH AND SAFETY PLAN

1 Notify Site Ope	rations Manager (Chris De	vine) of schedule.
	with security quard each	
= :	der Associates Health and	Safety Plan for additional
information.		
	and the second s	The second secon
		· · · · · · · · · · · · · · · · · · ·
·		· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·	等心臟·動化物 15
14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		100 大沙州 " 没有 "的特别的
بدوان والمراجعة والم	in in the second of the second	the section and the section with the
	 	
ictory Briefing following personnel were Macc April 12 (date) at and are familiar with its Name	present at a pre-job safety briefing ISRT Trailers	ng conducted at (time
following personnel ware Mac Amil L'(date) at and are familiar with its Name	ISRT Trailers	(location), and have read the above
tollowing personnel ware Mac Amil L'(date) at and are familiar with its Name	ISRT Trailers	(location), and have read the above
tollowing personnel ware Mac Amil L'(date) at and are familiar with its Name	ISRT Trailors provisions. Itelle. Normandour	(location), and have read the above
tollowing personnel war Mac April L'(date) at and are familiar with its Name	ISRT Trailors provisions. Itelle. Normandour	Signature Nary T. Landelle
tollowing personnel ware Mac Amil' L'(date) at and are familiar with its Name Mary T. Gar List F. Sny Thank May 6.	ISRT Trailers provisions. Itelle. Normandour effectively: Geologic	Signature Nary T. Landelle
tollowing personnel ware Mac Amil' L'(date) at and are familiar with its Name Mary T. Gar List F. Sny Thank May 6.	JSRT Trailers provisions. Itelle. Normandous effectively: Geologic	Signature Signature Mary T. Landelle Kenthony & Montine
Mary T. Gar Many T. Gar Many T. Gar Mary T. Shu Many T. Shu Many Many Mary T. Shu Many Many Many Many Many Many Many Many Many Many Many Many Many Many Many Many Many	ISRT Trailers provisions. Itelle. Normandour effectively: Geologic	Signature Nary T. Landelle
tollowing personnel ware Mac Amil' L'(date) at and are familiar with its Name Mary T. Gar List F. Sny Thank May 6.	JSRT Trailers provisions. Itelle. Normandous effectively: Geologic	Signature Signature Mary T. Landelle Kenthony & Montine
Mary T. Gar Many T. Gar Many T. Gar Mary T. Shu Many T. Shu Many Many Mary T. Shu Many Many Many Many Many Many Many Many Many Many Many Many Many Many Many Many Many	JSRT Trailers provisions. Itelle. Normandous effectively: Geologic	Signature Signature Any Standard Any Standard Any Standard Any Standard Continued Standard Continue
Mary T. Gar Many T. Gar Many T. Gar Mary T. Shu Many T. Shu Many Many Mary T. Shu Many Many Many Many Many Many Many Many Many Many Many Many Many Many Many Many Many	JSRT Trailers provisions. Itelle. Normandous effectively: Geologic	Signature Signature Signature Anathorizand Montine Contherizand Montine Contherizan
Mary T. Gau Many T. Gau Mary T. Gau Mary T. Gau Mary T. Shu Mary T. Gau Mary	JSRT Trailers provisions. Itelle. Normandous Lichard Grand Grand Jacker College Fre extinguisher evallable	Signature Signature Any Structure Conthoning of Montine Conthoning of Manual U.G. Structure Conthoning of Structure Control of
Mary T. Garante Mary T. Garante Mary T. Garante Mary T. Garante Mary T. Shur Mary Mary Mary Mary Mary Mary Mary Mar	JSRT Trailors provisions. Itelle. Normandous Lef little: Geologic licman	Signature Signature Signature Conthony of Montine Conthony of Manual Conthony Conthony of Manual Control Conthony of Manual Control Conthony of Manual Control Contro

Golder Associates Inc.	HEAL	TH AND SA	FETY PLAN	Page 8 of 10 Rev. No. 0
Special instructions				1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
1. Notify Site Oper	etions Mana	ger (Chris D	evine) of schedule	o officials
2. Sign in and out				
			d Safety Plan for	dditional
information.		a production and a second	. 19 1. 18 11 °	
	· · · · · · · · · · · · · · · · · · ·			Company of
. 444 T	s Saturbara	and the state of t	er, a sale je di sale je dana	to the state of the
· · · · · · · · · · · · · · · · · · ·		रक्ष्मी मिन पुरूष देशका हुई हारून इ.स.च्या	A CONTRACTOR OF THE PROPERTY O	
		•	""	
				A CONTRACTOR OF THE PARTY OF TH
	•		(* * * * * * * * * * * * * * * * * * *	
A STATE OF THE STATE OF	ali walio 🦂			· "龙江省"
**	2 14 A 14 1 14 1 15			He warm
			1 2 2 2	6 7/
Salety Briefing		+	la de la composición dela composición de la composición de la composición dela composición dela composición dela composición de la composición dela composición de la composición de la composición dela c	# 1 Min
pe jojiowing beleduling male t	xesell et a bl	e-job salety brief	ing conducted at 22	3 0 (time)
14/10/90 (date) al	5,70	trailer	(location), and h	eve read the above
lan and are familiar with its pr	ovisions.		S. Sienes	14 11
Robert	Tiles		Signature	
A Section of the stage	r. 117		444	1.00
4 \$4:			A 1 50 4.5 33	Characters
	and the second		Service Control of Control	The Late
in the second of		e Majoriania de la composición de la c	al and a state of the second state of the second	o sid o u reĝisprisulgianis
- 14	· .		संस्थान राज्यास्त्र, संस्था	
		संसद्धाः हो। हेर्द्		5.000 整件 精 400
Land Street	·			1 1° ije.
	· ·			
			e e e e e e e e e e e e e e e e e e e	The second second
A STATE OF THE STA			and the state of the	why did the to

YES ET All project personnel advised of location of nearest phone?

YES ET All project personnel advised of location of designated medical facility or facilities?

J. Edmund Baker Printed Name of Project Manager

		•		
(B)	Golder	Associ	B108	inc

HEALTH AND SAFETY PLAN

Page _8_ et _10 Rev. No. _0

1. Notify Size Operations Manager (Chris Devine) of schedule 2. Sign in and out with security guard each day 3. Consult the Golder Associates Health and Safety Plan for additional information. Give Charles and Christian and Christian and Christian and Christian and are lamiliar with its provisions. Name Craca A Wood Fully stocked First Ald Kit available on site? YES D. Fully stocked First Ald Kit available on site? YES D. All project personnel advised of location of nearest phone? YES D. All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker (Printed Name of Project Manager)	Special Instruct	ions	e e e e e e e e e e e e e e e e e e e	and the state of t
3. Consult the Golder Associates Health and Safety Plan for additional information. Safety Briefing a sold of the safety briefing conducted at the safety Briefing personnel ware present at a pre-lob safety briefing conducted at the safety and have read the above on and are tamiliar with its provisions. Alama Signature Figure 1. Sold of the safety briefing conducted at the safety briefing conducted at the safety safety safety safety briefing conducted at the safety safety safety briefing conducted at the safety	1. Notify S	ite Operations Mana	ager (Chris De	vine) of schedule.
Information. Safety Briefling Is following personnel were present at a pre-job safety briefling conducted at the state of	2. Sign in	and out with secur	ity guard each	day.
Safety Briefling soldwing personnel ware present at a pre-lob safety briefling conducted at OBJ (time April 16 190 (date) at SEC Trailed (location), and have read the above in and are familiar with its provisions. Name Craca A Wood Figure Constant Const	3. Consult	the Golder Associat		
Balerty Briefing a following personnal were present at a pre-job safety briefing conducted at	informat	ion.	***	
Belety Briefing a following personnel were present at a pre-job safety briefing conducted at April 16 140 (date) at 51 to 1000000 Part On Mane J. Edmund Baker J. Edmund Baker	·			
Belety Briefing a following personnel were present at a pre-job safety briefing conducted at OBIS (time April 16 1990 (date) at SIK TraileS (location), and have read the above in and are familiar with its provisions. Name Varia Mood Livin Deal Figs D Fully charged ABC Class fire entingulative available on alle? VES D Fully stocked First Ald Kit available on site? VES D All project personnel advised of location of designated medical facility or some site in the site of the sit		u Maja Sila Sala u Maria na		
Befory Briefing a following personnel were present at a pre-lob safety briefing conducted at OBI (time April 16 190 (date) at SEC Trailed (location), and have read the above in and are familiar with its provisions. Name Craca A Wood Fig. 12 Fully charged ABC Class fire extinguisher available on alte? FES ID Fully charged ABC Class fire extinguisher available on alte? FES ID Fully stocked First Aid Kit available on alte? FES ID Ail project personnel advised of location of nearest phone? FES ID Ail project personnel advised of location of designated medical facility or sacilities? J. Edmund Baker Princed Name of Project Manager			Professional Control of the Profession of the Control of the Contr	A STATE OF THE STA
Belety Briefing a following personnel were present at a pre-lob safety briefing conducted at OBI (time April 16 190 (date) at SIR Trailed (location), and have read the above in and are familiar with its provisions. Name Craca A Wood Fig. D. Futly charged ABC Class fire extinguisher available on alte? FES D. Futly charged ABC Class fire extinguisher available on alte? FES D. Futly stocked First Aid Kit available on site? FES D. Ail project personnel advised of location of nearest phone? FES D. Ail project personnel advised of location of designated medical facility or solities? J. Edmund Baker (1979) (Name of Project Manager)				(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
Belety Briefing a following personnel were present at a pre-lob safety briefing conducted at OBI (time April 16 190 (date) at SIR Trailed (location), and have read the above in and are familiar with its provisions. Name Craca A Wood Fig. D. Futly charged ABC Class fire extinguisher available on alte? FES D. Futly charged ABC Class fire extinguisher available on alte? FES D. Futly stocked First Aid Kit available on site? FES D. Ail project personnel advised of location of nearest phone? FES D. Ail project personnel advised of location of designated medical facility or solities? J. Edmund Baker (1979) (Name of Project Manager)			*	· · · · · · · · · · · · · · · · · · ·
Balety Briefling following personnel were present at a pre-job salety briefling conducted at OSIS (time April 16 190 (date) at Sife fraction), and have read the above in and are familiar with its provisions. Craca Vocat				建设建筑。
Belety Briefling In following personnel were present at a pre-job safety briefling conducted at 08/5 (time April 16/90/(date) at 5/6 frailed (location), and have read the above in and are tamiliar with its provisions. Cracia A Wood Fully charged ABC Class fire extinguisher available on site? (ES D) Fully stocked First Aid Kit available on site? (ES D) All project personnel advised of location of nearest phone? (ES D) All project personnel advised of location of designated medical facility or solitiles?				建筑的设施。
Balety Briefling In tollowing personnel were present at a pre-job salety briefling conducted at OSIS (time April 16 199 (date) at SIK Trailot (location), and have read the above in and are familiar with its provisions. Name Provided Name Fully charged ABC Class fire entinguisher available on site? (ES IN Fully charged ABC Class fire entinguisher available on site? (ES IN Fully stocked First Ald Kit available on site? (ES IN All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker		多 物种 体。 化聚烷化	to be a land	11. 11. 11. 11. 11. 11. 11. 11. 11. 11.
TES II Fully charged ABC Class fire extinguisher available on alte? FES II Fully charged ABC Class fire extinguisher available on alte? FES II Fully stocked First Aid kit available on alte? FES II All project personnel advised of location of designated medical facility or activities? J. Edmund Baker		的。 "是是我们的格式	e digital stated (1997)	the state of the s
TES II Fully charged ABC Class fire extinguisher available on alte? FES II Fully charged ABC Class fire extinguisher available on alte? FES II Fully project personnel advised of location of designated medical facility or activities? J. Edmund Baker				
April 16 190 (date) at SIKE trailers (location), and have read the above in and are familiar with its provisions. Name Figure 1900 Force A Vocat Fully charged ABC Class fire extinguisher available on site? FES ET Fully charged ABC Class fire extinguisher available on site? FES ET Fully stocked First Aid Kit available on site? FES ET All project personnel advised of location of nearest phone? FES ET All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker Printed Name of Project Manager () Printed Name of Project Manager	Safety Briefing		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	le saline a friend to
/ES XI Fully charged ABC Class fire extinguisher available on site? /ES XI Fully stocked First Aid Kit available on site? /ES XI All project personnel advised of location of nearest phone? /ES XI All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker Printed Name of Project Managed Printed Name of Project Mana	(raia A		ne dažio Midde () i i i Todania	Li Hills
Fully charged ABC Class fire extinguisher available on alte? YES © Fully stocked First Aid Kit available on site? YES © All project personnel advised of location of nearest phone? YES © All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker	Kevin	6 Nall.		Leve Cople Or
Fully charged ABC Class fire extinguisher available on site? FES ID Fully stocked First Aid Kit available on site? FES ID All project personnel advised of location of nearest phone? FES ID All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker		AA:		Service Constant
Fully charged ABC Class fire extinguisher available on site? FES ID Fully stocked First Aid Kit available on site? FES ID All project personnel advised of location of nearest phone? FES ID All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker		The Control of the Co	e en	Simple and Supple statements are properly and supple supple supple supple statements.
Fully charged ABC Class fire extinguisher available on site? FES ID Fully stocked First Aid Kit available on site? FES ID All project personnel advised of location of nearest phone? FES ID All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker				रक्षण प्रकार के से विश्व के स्वर्ण के किस्ता के कि
/ES II) Fully charged ABC Class fire extinguisher available on alte? /ES III Fully stocked First Aid Kit available on site? /ES III All project personnel advised of location of nearest phone? /ES III All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker Printed Name of Project Manager				
Fully charged ABC Class fire entinguisher svallable on site? /ES ID Fully stocked First Aid Kit svallable on site? /ES ID All project personnel advised of location of nearest phone? /ES ID All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker			े अधिक्या है है है	
Fully charged ABC Class fire entinguisher available on site? /ES ID Fully stocked First Aid Kit available on site? /ES ID All project personnel advised of location of nearest phone? /ES ID All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker Printed Name of Project Manager			a e e e e e e e e e e e e e e e e e e e	Same and the same same and the same same same same same same same sam
Fully charged ABC Class fire entinguisher available on site? /ES © Fully stocked First Aid Kit available on site? /ES © All project personnel advised of location of nearest phone? /ES © All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker Printed Name of Project Manager				A CONTRACT CONTRACT OF THE PARTY OF
Fully charged ABC Class fire entinguisher available on site? /ES © Fully stocked First Aid Kit available on site? /ES © All project personnel advised of location of nearest phone? /ES © All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker Printed Name of Project Manager				Control Control Control and State
FES ET Fully stocked First Aid Kit available on site? FES ET All project personnel advised of location of nearest phone? FES ET All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker Printed Name of Project Manager			linguisher avallable	P. W.
FES EJ All project personnel advised of location of nearest phone? FES EJ All project personnel advised of location of designated medical facility or facilities? J. Edmund Baker Printed Name of Project Manager	YES 🖾 Fully st	ocked First Ald Kit availal	ble on site?	the same of the sa
Printed Name of Project Manager of	YES KI All proje YES KI All and	ict personnel advised of l	location of nearest location of designs	phone?
J. Edmund Baker	and the sample of	 Tu huhémbi kéh Déli dé dé 	む ぼうさくたじ作すー	2. 1 · · · · · · · · · · · · · · · · · ·
Printed Name of Project Manager			* ***J. Edmund	Baker (1861) in digita in the control of the contro
		•		Printed Name of Project Manager

Golder Associates II	HEALTH AND SA	FETY PLAN	Page <u>1</u> of 10 Rev. No. <u>0</u>
Special instructions	ng sa		est estate
1. Notify Site O	perations Manager (Chris De	evine) of schedule.	্র্থী গায়ের
	ut with security quard each		. ≹ e i ij
	older Associates Health and	1 4	dditional
information.	र प्राप्त कर करें। इ.स. १९८० के क्षेत्र	ingress of the	A STATE OF THE STA
		· 特别 () (4) () (4)	
		and the state of t	Marie de la
	इ.स.च्या १ वर्षा १ वर्षा १ वर्षा १ वर्षा १ वर्षा		
	The state of the s	Sales Militaria	A. M. W. C. C. C.
			4.4
			A Branch
State of the State	While the table to be because	and the second of the second	त्र विकास क्षेत्रक के जाता कर
	त्र । विकास संस्थित व्यक्ति स्वापनी त्र (b)	Company and the second	a designative
	· · · · · · · · · · · · · · · · · · ·		
Safety Briefing he following personnel w	ere present at a pre-job safety briefi	,	And the second s
ne following personnel with 16-90 (date) i	1 51te trailers	A to a state of the second	(time)
he following personnel wi n 4-16-90 (date) i	1 51te trailers	(location), and he	And the second s
n 4-16-90 (date) an and are familiar with a Nam	is provisions. WHITTY GOLDER	(location), and he	And the second s
ne following personnel with an and are familiar with a Nam	is provisions. WHITTY GOLDER	(location), and he	oned the above
ne following personnel with an and are familiar with a Nam	is provisions. WHITTY GOLDER	(location), and he	And the second s
an and are familiar with a Nam JAMES E Smas J. JADIX TE	SITE trailers Is provisions. WHITTY GOLDER WEST LOGIC	(location), and he	oned the above
an and are familiar with a Nam JAMES E	SITE trailers Is provisions. WHITTY GOLDER 11. GEO LOGIC	(location), and he	oned the above
ng following personnel with 1 4-16-90 (date) an and are familiar with 1 Nam JAMES E MAS J. JADIX TE	SITE Trailers Is provisions. WHITTY GOLDER 1. GEO LOGIC	(location), and ha	re read the above
ne tollowing personnel with 14-16-90 (date) an and are familiar with 18 Nam JAMES E	SITE Trailers Is provisions. WHITTY GOLDER 1. GEO LOGIC	(location), and ha	re read the above
ng following personnel with 1 4-16-90 (date) an and are familiar with 1 Nam JAMES E MAS J. JADIX TE	SITE Trailers Is provisions. WHITTY GOLDER 1. GEO LOGIC	(location), and ha	re read the above
an and are familiar with a Nam JAMES E MAS JARIXETTE	SITE Trailers Is provisions. WHITTY GOLDER WEST LOGIC	(location), and he	read the above
an and are familiar with a Nam JAMES E Smas J. JADIX TE	SITE Trailers Is provisions. WHITTY GOLDER LOGIC	(location), and he	read the above
YES T Fully charged YES To Fully stocked I	ABC Class fire extinguisher available first Ald Kit available on alle?	(location), and he Signature	read the above
YES I Fully charged of YES II Fully stocked if	Is provisions. WHITTY GOLDER WHITTY GOLDER ABC Class fire extinguisher available	(location), and he Signature	read the above

1 14 Sept.

Princed Name of Project Manager

(Z)	Golder	Associ	etes Inc.

HEALTH AND SAFETY PLAN

Page _1 of _10

1. Nortfu	Site Operat	ions Mana	ger (Chris De	vine) of s	chedule.	<u> 1986 - 1985</u>	
			ty guard each				
			es Health and	•	an for ad	ditional	
informa	tion.		op in the	វម្មា 😙	3 18	CHAPTER TO	
·- ·				*	海 网络东		
•		ili lisa (Berria) da	a 18 a ding o	र प्राप्त के स्तरित्रेश गिर्हे	A STATE OF THE	A STATE OF S	97.00
	7.7		est of the second position of	A LOS A CONTRACTOR	W. Park		pro A.
	·			a tragerist Stage			
			S. In Law Section 3	*	· 建二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十	"精素"。	
					基本原 主		
					* 1	清燥。	Τ,
	图 數指令人	· ·	in in the con-	1.4	FR BALL	"William"	
	•	a Sail Settle	utro espris de seco	र १ अ अस	方数 資產 致	a grant	
Safety Briefing				a *		4	
e tollowing pen	ouvěj Málé bré	sent at a pro	-lob salgly brigili				time)
ne tollowing pen	(datė) 41 coure Málė bie	site t	-job salety briefly Callect			a end the at	in t∎
op tollowing period (1-25-90) an and are famil	connel were pre (date) at iar with its provi Name	site t	rallers		on), and have Signature		in t∎
cy-25-90	connel were pre (date) at iar with its provi Name	site t	railes		on), and have Signature	read the ab	in t∎
of tollowing periods of the series of the se	connel were pre (date) at iar with its provi Name	site t	rallers		on), and have Bigneture	a end the at	in t∎
of tollowing periods of the tension	connel were pre (date) at iar with its provi Name	site t	rallers		on), and have Bigneture	read the ab	in t∎
of tollowing periods of the tension	connel were pre (date) at iar with its provi Name	site t	rallers		on), and have Bigneture	read the ab	in t∎
tollowing period (425-90) an and are family teven	iar with its provi Name	site t	rallers	/ (location	on), and have	read the ab	in t∎
of tollowing periods of the tension	iar with its provi Name	site t	railers	/ (location	on), and have	read the ab	in t∎
tollowing period (425-90) an and are family steven	connel were pre (date) at iar with its provi Name	site t	railers	(location)	on), and have	read the ab	in t∎
tollowing period (425-90) an and are family teven	connel were pre (date) at iar with its provi Name	site t	railers	(location)	on), and have	read the ab	in t∎
tollowing period of the control of t	iar with its province Name	sielons.	ralles	(location)	on), and have	read the ab	in t∎
YES ET Fully of YES ET All pro	ichnel were pre (date) at	isions. Georgias fire extinuity of kit evallab advised of k	inguisher available on site?	(location) on site? phone?	on), and have	read the at	in t∎
YES ET Fully of YES ET All pro	charged ABC Conceived Personnel	isions. Georgias fire exting the service of the se	railes	phone?	Signature	read the at	Ove

Golder Associates in	HEALTH AND SAFETY	FEAN	Rev. No0_
3. Special Instructions			
1 Notify Site Or	perations Manager (Chris Devine) o	of schedule	·
	ut with security guard each day.		
Consult the Go information.	older Associates Health and Safety	Plan for	dditional
intormation.			
1. Safety Briefing			
The following personnel we	are present at a pre-job safety briefing conduction of the conduct		
The following personnel we on $3-6-90$ (date) a	1 1:00 FM - 2:00 PM (10		
The following personnel we on 3-6-90 (date) a plan and are familiar with it.	$\frac{1 - 1/00 FM - 2/00 FM}{\text{s provisions}}$		eve read the abov
The following personnel we on 3-6-90 (date) a plan and are familiar with it.	$\frac{1 - 1/00 FM - 2/00 FM}{\text{s provisions}}$	ocation), and h	eve read the abov
The following personnel we on $3-6-90$ (date) a	s provisions.	ocation), and h	eve read the above

YES Thilly charged ABC Class fire extinguisher available on alte?
YES Thilly stocked First Aid Kit available on alte?
YES Thilly stocked First Aid Kit available on alte?
YES Thilly project personnel advised of location of nearest phone?
YES Thilly project personnel advised of location of designated medical facility or facilities?

J. Edmund Baker

Printed Name of Project Manager

Golder Associates	inc. HEALTH AND S	AFETY PLAN	Page _8 or _10 Rev. No0
0. Special instructions			10 M
1. Notify Site (Derations Manager (Chris	Devine) of schedule.	5 4 9 5 8 7
2. Sign in and c	out with security guard ea	ch day	
3. Consult the (Golder Associates Health a	nd Safety Plan for a	dditional
information.	p property	19175578118	
1.4.		· · · · · · · · · · · · · · · · · · ·	Co. 16 19 10
	ું કેઇ કે પૈકેલ કર્યા છે. તેને પુરા પ્રાથમ ફે કે ફન		
``	.=	建作的。	
		(A) (A) (A)	34. 雅·雅
			11.
·		沙马斯	DESTRUCTION OF
	917 San San Carlotte British Carlotte	1994年17年高海科	A THE WAY
<u> </u>	e dan di Maria (1700) di di di es	2011年 1911年 11日本 11日本 11日本	Harris And
		V 188	Un vi
. Safety Briefing	te de la companya de	i ya	1
The tollowing personnel w	tate bressin at a bie-lop stillath pi	efing conducted at	(time)
	11 Industri-plex site	(location), and h	eve read the above
lan and are familier with	Re provisions.	Signature	and the same
flawle)	Lenner Con	enclare	O Perulo
	Who is a fifty that		The state of the s
	16.	Section 1997 And Section 1997	Or mate.
48.5 (Commence of the commence of th	S Notice of the second representation of the	·
·			* (日本) (1945)
80 J	and the state of t	CAR COMMING	elete rasi di v
On the state of th	The same of the sa	stance of the second second	
	· 		
	<u> </u>	· · · · · · · · · · · · · · · · · · ·	a government

YES IT Fully charged ABC Class tire extinguisher available on site?
YES IT Fully stocked First Aid Kit available on site?
YES IT All project personnel advised of location of nearest phone?
YES IT All project personnel advised of location of designated medical facility or facilities?

* J. Edmund Baker

倒 Golder Associates Inc

HEALTH AND SAFETY PLAN

Page <u>9 et 10</u> Rev. No. <u>0</u>

		lanager (Chris Dev		e
		curity guard each	•	
3. Consult the	Golder Assoc	iates Health and	Safety Plan for	additional
information.		<u> </u>	· · · · · · · · · · · · · · · · · · ·	
				·
		 .	· · · · ·	
			· · ·	.
			,	
· · · · · · · · · · · · · · · · · · ·				
# 				
•				
· ·				
	•	a pre-job salety briefing		9450 (time
tollowing personnel v 7-16-90 (date) In and are familiar with Nar	at <u>Industri-1</u> ks provisions. ne	aex Trailers		have read the above
s following personnel with 7-16-90 (date) n and are familiar with	at <u>Industri-1</u> ks provisions. ne	• • • •	(location), and	have read the above
tollowing personnel v 7-16-90 (date) n and are familiar with Nar	at <u>Industri-1</u> ks provisions. ne	aex Trailers	(location), and	have read the above
o following personnel v 7-16-90 (date) n and are familiar with Nar	at <u>Industri-1</u> ks provisions. ne	aex Trailers	(location), and	have read the above
o following personnel v 7-16-90 (date) n and are familiar with Nar	at <u>Industri-1</u> ks provisions. ne	aex Trailers	(location), and	have read the above
o following personnel v 	at <u>Industri-1</u> ks provisions. ne	aex Trailers	(location), and	have read the above
s following personnel with name of the second secon	at Industri-1 Its provisions. The Garage	aex Trailers	(location), and	have read the above
totlowing personnel v 7-16-90 (date) n and are familiar with Nar SE A. CAPPER	at Industri-1 Its provisions. The Garage	aex Trailers	(location), and Signatur	have read the above
s following personnel with name of the second secon	at Industri-1 Its provisions. The Garage	DER ASSOCIATES	(location), and Signatur	have read the above
n and are familiar with Nar	at Industri-1 Its provisions. The Garage	DER ASSOCIATES	(location), and Signatur Rose //	have read the above

J. Edmund Baker

Printed Name of Project Manager

Signature

Date

Golder Associates Inc	HEALTH AND SAFETY PLAN	Page 8 of 10 Rev. No. 0
0. Special Instructions		
1 Notify Site Ope	rations Manager (Chris Devine) of schedul	le.
	with security guard each day.	
3. Consult the Gol information.	der Associates Health and Safety Plan for	r additional
Informacton.		
	·	
1. Safety Briefing		· -
	present at a pre-job safety briefing conducted at	0:30 (time)
on 11/4/90 (date) at	· · · · · · · · · · · · · · · · · · ·	I have read the above
plan and are familiar with its p	provisions.	ITS .
Livry year	es uniqu	121 <u>0</u>
Mike Zarensk		James de
Christopher Agoglia	Chietepha (G	oglea.
Cheryl Brook	s Chil Groot	
Christopher Agnolia Cheryl Brook Mark Jandrot	Shistopher (6) Short Brook Maril Long	ms -
	1//0	
• • • • • • • • • • • • • • • • • • •		

YES Thilly charged ABC Class fire extinguisher available on site?
YES Thilly stocked First Aid Kit available on site?
YES Thilly stocked First Aid Kit available on site?
YES Thilly project personnel advised of location of nearest phone?
YES Thilly project personnel advised of location of designated medical facility or facilities?

J. Edmund Baker Printed Name of Project Manager

Golder Associates Inc.	HEALTH AND SAFETY PLAN	Page _9 ef _10 Rev. No0
Special instructions		
1 Notify Site Oper	stions Manager (Chris Devine) of schedul	e
2. Sign in and out	with security guard each day.	
3. Consult the Golde	er Associates Health and Safety Plan for	additional
information.		
<u> </u>		
A		· · ·
		·
		- *
		· · · · · · · · · · · · · · · · · · ·
Refety Briefing		
Belety Briefing a following personnel were (present at a pre-job safety briefing conducted at	12:000m_(tir
o tollowing personnel were 12 3 90 (date) at <u>™</u>	SET/GOUTE MA WORMAN MA (location), and	12:00pm (tir
tollowing personnel were 12 3 90 (date) at <u>*</u>	SET/GOUTE MA WORMAN MA (location), and	
a following personnel were p 12 3 90 (date) at n and are familiar with its pr Name	SRT/GRUTR MA WORMAN MA (location), and ovisions. Signature	have read the above
n tollowing personnel were partially at 12/3/90 (date) at 12/3/90	SRT/GOUTR MA WORMAN MA (location), and ovisions. Signature	
a following personnel were p 12 3 90 (date) at n and are familiar with its pr Name	SRT/GOUTR MA WORMAN MA (location), and ovisions. Signature	have read the above
n tollowing personnel were partially at 12/3/90 (date) at 12/3/90	SRT/GOUTR MA WORMAN MA (location), and ovisions. Signature	have read the above

YES Truly charged ABC Class fire extinguisher available on site?
YES Truly stocked First Aid Kit available on site?
YES All project personnel advised of location of nearest phone?
YES All project personnel advised of location of designated medical facility or facilities?

J. Edmund Baker Printed Name of Project Manager

 •	
Golder Associates	inc

HEALTH AND SAFETY PLAN

Page _1 of _10_ Rev. No. _0

3. Special Instructions	
1. Notify Site Operations Manager (C	Chris Devine) of schedule.
2. Sign in and out with security gus	
3. Consult the Golder Associates Hea	alth and Safety Plan for additional
information.	·
	<u> </u>
<u> </u>	
	
. Safety Briefing	
The following personnel were present at a pre-job supplied to the pre-job supp	slety briefing conducted at <u>0730</u> (time) (location), and have read the above
plan and åre familiar with its provisions. Name	Signature
LIZ KREML	1 is Kreml
1	
	
	·
YES The Fully charged ABC Class fire extinguish YES The Fully stocked First Aid Kit available on a YES All project personnel advised of location YES All project personnel advised of location	ske?
	J. Edmind Rekey

Printed Name of Project Manager

Joider Associates Inc.

HEALTH AND SAFETY PLAN

Page <u>9 of 10</u> Rev. No. <u>0</u>

Notify Site Operations	Manager (Chris Dev	ine) of schedule.
2. Sign in and out with se		
. Consult the Golder Asso	ociates Health and	Safety Plan for additional
information.		
	·	
efety Briefing		
following personnel were present a	It a pre-job safety briefing	conducted at 10:00 (time
	Trailer	(location), and have read the above
and are familiar with its provisions.	•	Signature.
	GOLDER	Thilling (ps)
	· Environmetrix	
	<i>i</i>	himis R. Word
benes R. Worden	D. C. Makes	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
uel James Strickland	for Dite Mahoc	() flicted
	Colder	Mar K Honder
Mark R. Sandfort		
Mark R. Sandfort		<u> </u>
	re extinguisher available (

J. Edmund Baker

Printed Name of Project Manager

(2) Golder Associates Inc.

HEALTH AND SAFETY PLAN

Page <u>9 of 10</u> Rev. No. <u>0</u>

2. Sign in and out with security guard each 3. Consult the Golder Associates Health and information. alsty Briefing following personnel were present at a pre-job safety briefing 3-26-91 (date) at Following. And are familiar with its provisions. Name	ng conducted at (time: (location), and have read the above
alety Briefing tollowing personnel were present at a pre-job safety briefing 2-26-91 (date) at Following. Name Mary C. Bourciar	ng conducted at
Information. alety Briefing tollowing personnel were present at a pre-job safety briefing 3-26-91 (date) at Foliability Rem Site and are familiar with its provisions. Name Mary C. Boureier	ng conducted at
Information. elety Briefing tollowing personnel were present at a pre-job safety briefit 3-26-91 (date) at Following. Rem Site and are familiar with its provisions. Name Mary C. Boureier	ng conducted at
efety Briefing following personnel were present at a pre-job safety briefit 3-26-91 (date) at	(location), and have read the above
tollowing personnel were present at a pre-job safety briefis 3-26-91 (date) at Following Rem Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
tollowing personnel were present at a pre-job safety briefis 3-26-91 (date) at Following Rem Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
tollowing personnel were present at a pre-job safety briefis 3-26-91 (date) at Following Rem Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
tollowing personnel were present at a pre-job safety briefit 3-26-91 (date) at Following Rem Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
tollowing personnel were present at a pre-job safety briefis 3-26-91 (date) at Following Rem Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
tollowing personnel were present at a pre-job safety briefis 3-26-91 (date) at Following Rem Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
tollowing personnel were present at a pre-job safety briefis 3-26-91 (date) at Following Rem Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
tollowing personnel were present at a pre-job safety briefis 3-26-91 (date) at Following Rem Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
tollowing personnel were present at a pre-job safety briefis 3-26-91 (date) at Following Rem Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
tollowing personnel were present at a pre-job safety briefis 3-26-91 (date) at Following Rem Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
3-26-91 (date) at Industri- Plex Site and are familiar with its provisions. Name Mary C. Boureier	(location), and have read the above
and are familiar with its provisions. Name Mary C. Boureier	6 Signature 6
Mary C. Boureier	Signature
Mary C. Boureier	No A Kanyan
	Y and Frances
	16/11-1
BILL BUNGHAM	They D:
SILL INFORMATION	b) 27
ES D Fully charged ABC Class fire extinguisher available	e on site?
ES ID Fully stocked First Ald Kit available on site?	
ES 12 All project personnel advised of location of neares ES 12 All project personnel advised of location of design	1 = 6 = = = A

J. Edmund Baker

Printed Name of Project Manager

Signature

Date

NORMANDEAU ASSOCIATES

MEMORANDUM

To:

Bob Glazier

From:

Kent E. Snyder, Ph.D.

Date:

2 November 1990

Subject:

ISRT Safety Review

As you requested today during our phone conversation, I have reviewed safety procedures for the ISRT site with Lee Carbonneau. Topics we discussed included: personal safety equipment, decontamination pad location and use, check-in and check-out procedures, personal hygiene, and site specific safety (H₂S, local depressions, wetland/stream banks, power lines, railroad, street traffic, etc.). She will be accompanied by Craig Wood (6 November) on a site visit. I have enclosed a copy of Lee's hazardous waste site activities certificate. Please call me if you have any questions.

KES:ejh Enclosure

TO: FILE	
FROM: Kent E. Snyder	
Memorandum of I	Meeting
,	
Meeting with: Bob Hasevlat Ret	Project: 10538.09 (ISRT)
Don Mason	Date: 2/15/91@1:30 ^{PM}
Joe Payne JEP	Tel. No.: <u>()</u>
Chuck Porembski -685	
Subject: A meeting was held +	— diaring the mothers
to be used at the sit	
acquisition and safety	· · · · · · · · · · · · · · · · · · ·
the options available	depending upon ice
conditions and how ice	
during the period of time	That the fuldwork was
undertaken. A preliminary	vecon to be done
by Churk and Don early	rest week to review
conditions at a distance	
Chuck was put in-charge	field specations. All agreed.
procedures	
	also reviewed: ppe,
decontamination, check-in q	-out, and site specific
Sofety problems (railroad,	chocolored soils and sprilpiles:
Hrs troffic etc) Bob	was put incharge of
health & safety on-rite for	20Th NAT & TWM-NE, JA
was explicit that health ?	
operational decisions. Al	
Signature_	
Title _	Project Manager

	1	•	
Ĭ	~~	Ì	2

				TIME					
NAME	DATE	COMPANY	PURPOSE	LOG IN	LOG	OUT_	1		
123 Low	(3/1/91	TWMNE	1 en va	720 AM				1	
2 PHIL BIRROWS	3/1/91	TWM ME.	Surve	7:20 AM	1				
3 BILL MAC YEAR	3/1/21	" ALPHA		7:20 Am]				
1 leh Markett	3/1/91	1 1	N	7:20 Am			<u> </u>	<u> </u>	
5 Man Hogersch	3/1/91	TWM NE	"	7:7000				<u> </u>	
6 Com Com	12/1/11	1	/14	7:20 Am			<u> </u>		<u> , </u>
7 / / / /	1//			r / / /			<u> </u>	<u> </u>	1
8	1//	1/ / 1/		/ / /		/ /	1//	1//	$V \angle$
1/ Dan Hegenis	13/6/9/	TUMBE	SUNDEY	7/15 pm		<u> </u>	<u> </u>		<u> </u>
10 Bus Mackenzie	3/6/21	BLIFAR	<i>e</i>	7:05 00				1	<u> </u>
11 John Me Cit	3/6/91	ALPHA	11	7'15 Am			ļ		<u> </u>
12 K. F. VOUNENKAN	- i' - · · · · - · · · - · · · · · · · · ·	-1w/2 k -		1 (40)			<u> </u>		<u> </u>
13 F GuSTAFEON	3-6-91	Lt	и	7:15 AM			<u> </u>	<u> </u>	<u> </u>
14 PHIL REGOLDS	3-69/	Tum HE	[1]	7:15 AM			<u> </u>	1	1
15 / / / /	}// -/-				-//	//	-/	1/- /	 //
16 / / / /	/}	/ / /		7/	/_/		 		1 /
17 Dan Hoojosich	1	1 1		7:120	1		<u> </u>	<u>i </u>	1
18 John Machael	1 ' . ' .	ALPHA	" /	1:120	<u> </u>		<u> </u>	<u> </u>	<u> </u>
DILL Pheneuzine	T ' . Z	<i>"</i>	<u> </u>	7 21	<u> </u>			<u> </u>	
20 PHIC BURBOUS	3/7/9/	TWA HE		7:28	!	<u></u>	1	1	<u> </u> -
22	1			<u>-</u>			<u> </u>	<u> </u>	
	<u> </u>				1		1	<u> </u>	/
23				<u>_</u>	<u></u> <u> </u>	 		<u> </u>	'
25	1				<u> </u>		1	<u>'</u>	
25	<u> </u>			'	<u> </u>			 	

na	i
-----------	---

INDUSTRIPLEX BATHYMETRIC PROJECT LOGBOOK

P10538.09

Attendence. Tailgate Safety Meeting.

			,	TIME			والمسهورة وينهيزوك فأنتهون كالأ	
NAME	DATE	COMPANY	PURPOSE	LOG IN	LOG	OUT		
1 Den Hegerich	2/3/2	TWN NET	Isurvey	7:00	MA			
2 BULL MAC KAWZIA	1/21/91	ALPHA	1,	7:00		· .		
3 John Grassu	2/21/91	WM NE	//	7:00				
4 JOHN MACNETT	421/91	ALPAHA	u	7:00	<u> \ </u>			
5 Rager Browners	Calor 4/21/91	4ww.F	4	7:00	<u> </u>			
6 PHLIP E. BURROW	2/21/91	TWO ME.	и	7.00				
Boowlet			Fill	7:15	1	<u> </u>		
1 Mury Gaudette	2/21/91		fullsurvey	7:15	 			
9 Don Mison	21Fab41		Field	7:15	1 \	\ <u> </u>	-	1 .
10 MHORK BREHBSKI	2-21-71	WAI		7.75				
11								
12 lot baseveat			Field	7115				
13 Mary Gardette	2/22/91	NAI	Field	7:15		<u> </u>	<u> </u>	
14 JOHN MACHELL	2/62/91	1 - 1	SURVEY	7:15				
15 John Grasso	2/22/91		/ /	7/2	i	<u> </u>		
16 E. Browners Ka	•	1 1		7100				i i
17 CANCEL POR THE SKI		1 6	71	760			<u> </u>	
18 Dan Hegerich		TWA NE	Survey	7 50				1 1
19 Bell Maker		PINA	"	7:51		<u> </u>		
20 Chil Bour	2/21/91	Two ME	Survey	7:51				
" 14/2011 (Doundelle	2/23/91	WAI	Field Survay	737				
22 Filia Janelle	2/23/91	NA/	"	4		<u> </u>		
23 JOHN MACHELLE	2/23/71	ALPHA	SURVEY	7:37				
- JOHN COLURSO	2/23/91	THA NE	//	7:137		!		4
25 Joseph E. PAYN	c 2/23/91	NAT	Field Survey	7:38				
26 Bru Mackenzin	2 23 91	ALPHA	R 00'	7:38				
27 Brownerdon	H 423/91	Tunne	11 9	7:138				
28 74K 'ES "	1-23/	JUM HE	1, 1, y	71/55				1 1 1

۲	isi	
-		

INDUSTRIPLEX BATHYMETRIC PROJECT LOGBOOK

P10538.09

HASP Meeting.

MONNAMORAU ARRUCIATES, INC	المستحد المتحدد						7 10 101	, 00,	<u> </u>	
				TIM	E			<u></u>	0	,
NAME	DATE	COMPANY	PURPOSE	LOG IN	LOG	OUT		,	ļ	
1180 Asserbat	2/25/91	NAI	Shuley	0735			1	-		
<u> </u>	2-25-91	NAT	,,,	0735						
3 Jelice Jarulle	2/25/41	NA1	4	0735						
1 Joseph E Payme	2/25/91	NAT	11	0735		1				
5 Bohn Grasso	2/25/91	TWM NG		7.35	<u> </u>					
6 JOHN MACNEILL	2/25/91	ALPHA	n	7:35					}	
7 Bus Mackenzia	2/25/91		ч	7:35						
8 E. Prouvallar			_ 4	1735						
9 Dan Heganich	72.191	ا سر ا	11	7:30				į	•	
10 John Grasso	2/26/91		11	7:30		1			-	
11 Eloupen KANT	2/26/91	Telem No	E 4	7301						
12 Pil BURROWS	2/26/91		и	7:30						
13 Chuck Paendské	12641		11	7:30						
14 Mico Janelle	2/26/9	NAI	и	7:30					_	
15 Walt Exague	2/26/91	NAI	h	7:30		l I				
16 Bot Asserted	ZZEAN	NAR	P	730	1				į	
17 JOHN MACNEUL P	2/26/91	ALPHA		7.'50						
18 Delle D. Mary	2/26/81	ALRUA	4	7:30						
19 Jun marche	42111	ASPHA	1.	7 50						
20 John Grasso	3/27/91	TAMNE	11	2.30						
21 Transplant		Thomas	<u> </u>	7130						
	2-27-91	NAIT	11	7130						
00 0 0 0	2.2791	TWMINE	ч	7.30		_				
24 Bin Marken 210	2/27/21	ALPHA	"	7:30					4	
25 Filea Amile	2/27/41	NA!	a							
26 Dry Honecich	2/37/91	TWM NE		7:30						
27 Varbert Hosen?	-7/51	MAZ		7:30						
28 Joseph & Payne	12/22/11	NAI	11	7:30			,			
the state of the s	1 1 7 7 7		and the second s	*						

RMANDRAU ABBOCIATES, INC				TIM	E			
NAME	DATE	COMPANY	PURPOSE	LOG IN	LOG	OUT		
1 Robert Hasevelat	2/28/91	NAT	Survey.	7:10 AM				
2 Philip C. Burn	= 2/28/91	TWM NE	ч	7:10 AM		.]	·	
3 Chuck Township	u 2-2091	NAI	10	7:10AM				
4 Joseph E. Poun	2-28-91		41	7.10	<u> </u>			
5 John Macriel			4	7:10	<u> </u>			
6 Com Dos		TRUM NE	, h	7:10	<u> </u>			
Dan Hogerick	2/25/91			7:10	<u> </u>			
EB W	12209	10	14	7:10	<u> </u>			
Bu Macken 210	2/28/20	ALPAA	<u> </u>	1: 10	1	1	<u> </u>	,
)					<u>i</u>	<u> </u>		
	<u> </u>				<u>i</u>	<u> </u>		
2			<u> </u>		<u> </u>	<u> </u>	1	1 !
					1	<u> </u>		
: 1	<u> </u>	<u> </u>			<u> </u>	1		<u> </u>
· · · · · · · · · · · · · · · · · · ·			<u> </u>		<u> </u>	<u>' </u>	<u> </u>	
,					! -		<u> </u>	
					1		<u> </u>	
					1			<u> </u>
	<u></u>				 		<u>-</u>	
				<u> </u>				
		i		 -i				
								•
	- 				 			
						İ		
1 1	* *				<u> </u>			

Robert f- Crowerf
Signature

10/9/90
Date

Signavare

Date

Signature/

Date

Signature

Marck 19, 1990

Martha M. Smith
Signature

October 23, 1990

Date

Signature

Date

Signature 7

February (3,1990

Signature

October 30, 1990

D.L. Maher (o. (drillers)

I certify that I have read the Health and Safety Plan for Roux Associates, Inc. prepared for use in conjunction with the Pre-Design Plan at the Industri-Plex Site in Woburn, Massachusetts, and that I fully understand the requirements of it.

Signature

Date.

10-7-1990

Much Burt 3.26-90

Jak Bowl 4-4-90

APPENDIX 2-3

Ambient Air Monitoring Records



				Date 1 24 9 1 Sheet 1 of 1
Job Name_	Industri P	Iwobus	MAS	5Job Number <u>8 93 - 6255.8</u>
Location	Woburn	Mass		
Time In <u>⊘8</u>	CO_Time Out 16	<u>45</u> v	Veather <u> حاح</u>	ar Temp. 25 Wind D. V 15 mp
Instrument 3	Type HN U PI	101	14. 3EM	Serial No.
Calibration (Gas Isobutykny	9812m 1	nstrument Rea	ading 55 Span/Gain/RF Setting 2,79
and Concen	tration . If more than o	ne instrument	is used, document	calibration procedures and results for each additional instrument in
Time a				he instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time OPOO	Station Sample	Instr.*	Reading	Procedure/Observations/Comments
1	Point	1-5	0	during Sample collection
	29	H5747		indicated No volatiles or
1		Date		Has detected
10 45				THE CONTROL OF THE CO
10 73				
				
				
 ;				
·				

		. ——		
				
		•		
				
			•	
			Recomme	ndations
			Hocomine	·
				
			· · · · · · · · · · · · · · · · · · ·	
· 	·			
		·	· · · · · · · · · · · · · · · · · · ·	
•		· · · · ·	<u> </u>	<u> </u>
mils e	Zarens	<u> Кс</u>		Michael & Osabum
90-44A06	Printed Name			Signature



Deation Webvia Mass Firme In OBOD Time Out Weather Clear Temp. Is Wind D. V Instrument Type IN No. PT-101 Serial No. Serial		. 1			Date 1/23/91 Sheet of
Temp ISSP Wind D. V Instrument Type (I Nu PI 10) Serial No. Salibration Gas Tsobuty Leve Pospers Instrument Reading 55 ppcs Span/Gain/RF Setting 2.72 Indicentration - It more than one instrument is used, document cabination procedures and results for each additional instrument is procedured being and procedure and results for each additional instrument is procedured being and procedure (pp. 04). 31, 04% etc.) for each observation than the		•		Mass	Job Number 903-6255.8
Instrument Type (I Na PI-101 Serial No. Satisfication Gas TSobyty en e loopen Instrument Reading 55 ppn Span/Gain/RF Setting 7.72 and Concentration "I more than one instrument is used, document cash as the used (e.g. OV. 36, 10 W. 4c.) for each observation of below and indicate the instrument used (e.g. OV. 36, 10 W. 4c.) for each observation Station Instr. Reading Procedure/Observations/Comments DR45 Sample HNv/ O Continuously Air Monitored during Sample Collection 1046				. <u></u>	
Time Station Inst.* Reading Procedure/Observations/Comments Sample HN. O Cantinagously Air Monitore Collection Point B Hs O Cantinagously Air Monitore Collection 1300 Sample HN. O Cantinagously Air Monitore Collection Y Point Hs O Cantinagously Air Monitore Collection Y Point Hs O Cantinagously Air Monitore Collection Cant	ime In <u>08</u>	ဝင္_Time Out	\	Weather <u>C \ e</u>	acTemp. IS°F_Wind DV
Accommendations If more than one instrument is used, document calibration procedures and results for each additional instrument is recommendations section below and indicate the instrument used (eg. OVA, 261, OVA, etc.) for each observation recommendations section below and indicate the instrument used (eg. OVA, 261, OVA, etc.) for each observation instrument is recommendations. Time Station Instr.* Reading Procedure/Observations/Comments Quantizary Air Monitor ecc. Auring Sample Collection and Preparation to Sample. 1300 Sample HNV O Continuously Air Monitors V Point Hos O Work Area during Sample Collection and Preparation To Sample Recommendations	rstrument 1	rypetinu PI-	101		Serial No
Time Station instr. Reading Procedure/Observations/Comments 845 Sample HNV O Continuously Air Monitored Point 8 Has O during Sample Collection and preparation to Sample 1300 Sample HNV O Continuously Air Monitored Point Has O work Area during Sample Callection and Preparation 1400 Taxonously Air Manitoria Callection and Preparation Recommendations	alibration (enly Kodoz I za E	e 100ppm 1	Instrument Re	eading 55 ppm Span/Gain/RF Setting 2.72
Time Station Instr.* Reading Procedure/Observations/Comments DR45 Sample HNU D Continuously Air Monitored V Point Has D Guring Sample Collection and preparation to Sample V Point Has D Work Area during Sample Callection and Preparation Recommendations	nd Concern	tration • If more than	one instrument	is used, documer	nt calibration procedures and results for each additional Instrument in
DR45 Sample HNU O Continuously Air Monitored Point 8 Has O during Sample Collection and Preparation to Sample 1300 Sample HNU O Continuously Air Monitor V Point Has O Work Area during Sample 54 Collection and Preparation 1430 To Sample	Time	4			
Point 8 Has during Sample Collection and Preparation to Sample 1300 Sample HNU O Continuously Air Monitory Point Has O Work Airs during Sample 54 Collection and Preparation To Sample Recommendations					
1300 Sample HNV O Continuously Air Monitori V Point Hos O Work Aira during Sample 54 Callrition and Preparation To Sample. Recommendations	<u> </u>		Has		
Point Has O work Area during Sample 1430 To Sample 1430 Recommendations	045				and proparation to sample
Point Has O work Area during Sample Sample and Preparation To Sample and Preparation Recommendations	1300	Sample	UNH		Continuously Air Monitorine
To Sample. Recommendations		Point	_ Zell _		work Area during Sample
Recommendations		<u>54</u>		-	collection and Proporation
	1430			· · ·	to Sample.
				 	
					
		· · · · · · · · · · · · · · · · · · ·	 		
				<u>. </u>	
	 .		· ·		-
				 	
		- 		· · · · · ·	
				 	
	<u> </u>		· ,		
					
					· · · · · · · · · · · · · · · · · · ·
				Recomme	endations
	· · ·			, , ,	
	 _				
n = 1 + n = 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1	5 AL 5	Zarensko	•		milai Zous Di
Printed Name Signature	BIOLOGICE STATEMENT		 e	-	



		t.		Date 1/22 91 Sheet 1 of 1
Job Name	Industri.	9 1 Wab	022 / W	0.55 Job Number 893~6755 F
	ma para r	-		
Time In ≥8	45_Time Out	V	Weather <u> احْ° ۶</u>	Clear Temp. 15° Wind D. V
Instrument	Type HNU PT.	-101	10,200	Serial No.
Calibration	Gas <u>よらかけい</u> ntration ・ <i>H more than d</i>	ne instrument	Instrument Re <i>is used, documen</i>	pading 55 Span/Gain/RF Setting 2.69 of calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time	Station	Instr. *	Reading	Procedure/Observations/Comments
1300	Point 17			HNU PI-101 Continuously
		HNU		running while collecting
1350		HNu		Samp Tr.
1500	Paint 1	HND		HNU PI-101 continuous LV
		HNo	0	running while collecting
<u></u>		<u> </u>	0	Sample from Stream.
1530	<u> </u>	HNU	-0	
		<u>-</u>		
				
		·		
•			 	
				- · <u> </u>
	· · · · · · · · · · · · · · · · · · ·	 .		
	•		Recomm	endations
 				
· 				
mili-e	Zasensh Printed Name			Signature

						:	
((5/2)) Golde	r Associate	es Inc.			AIR MONITOR	and the second s	
		•	•		Date 5/29/90	Sheeto	1
Job Name Fold	and flox	Pres)e	isian Investi	dation	_Job Number _ 89	3-6255.5	
1	Vaburn)			
Location — 0800	0000111	(/00	dud	1	Temp. 65°F Win	ma	276 1
Time In						0 D. 🗻 V™	0-131ph
Instrument Type	Jeone	Gold fil	m: H25 de	tector_	_Serial No	· · · · · · · · · · · · · · · · · · ·	-
Calibration Gas_	N/F	<u> </u>	Instrument Read	ding \mathcal{N}	A Span/Gain/R	F Setting 1/1	<u> </u>
and Concentratio	The Management of the commence	one instrumer	nt is used, document o	calibration proc	edures and results for eached (eg. OVA, 361, OVAL	ch additional instrum atc.) for each observ	ent in
Time	Station	instr. •	Reading		cedure/Qbaeryatio		
1036	_3	H25	46,14,10,77	10	noticable as	lar	· .
1042	4	H2.5	0245				. •
1050	1	425	6244	•	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
1053	2_	425	316	salvien.	t smell from	Wasum dry	abarre
1107	5	1/25	0023	No not		~	
1108	6	#25	6/2/2	*.		i spiled	
1113	7	1/25	0001		u Lill n	vaible for	an this
		<u> </u>	اسونتر		local		te ava
1546	3	1/25	521988	(ain)			-
155	- Z	- 825	0122	1 -471)	3, 10 20, 10	7,70000	
1/09		11 6	0,0,00			. g** **.	7-1
160		- #2	0.333				
100		- 1775					
1621		- 412.2	0,0,1,7				
1002		HW	2011				
16.26	<u> </u>	H25	2 3,4,5				
							
					· · · · · · · · · · · · · · · · · · ·	·	
					·		
					·		
						· · · · · · · · · · · · · · · · · · ·	
						·	
							`
·							
					25 •		
			Recommen	dations		·	
•	•				•		
·							
							
	···						
01-1	M . / I	·····			21.12	20	
Kobert	M. Gla	Zies	خصاصان استجهر برجيح		obest M &	Kasper	
an amount	Printed Name	6	-		Signatur	re /	
	r · · ·					en e	

	Golder A	Associates	Inc.
--	----------	------------	------

· 	-1 100	Pa David Tora	Date 5-25-90 Sheet 1 of 1 Agation Job Number 893-6255.5
Job Name	LAUSTI- MA	ez re-vesión mue	3/3/4/75/1 Job Number _ 6 12 6 24 3.3
Location	00 00 1 /· 17-	1800 Weather SUM	-21°E tran
Instrument Ty	ype Joane	gdd f3/m H25 defe	Serial No.
Calibration G		Instrument Read	
and Concents	ration • # more than	one instrument is used, document (calibration procedures and results for each additional instrument in a instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time	Station	Instr. * Reading	Procedure/Observations/Comments
1615	3	1425 25801	honotrable odor
16/8	4	H25 10,2,34	
1626	* (H25 0123	
1632	2	H25 0,012	
1645	5	H25 60,01	
1650	6	H25 0,034	
1657		1/25 0001	- downwind of EHP
	••••••••••••••••••••••••••••••••••••••		
		- 	
	- · · · · · · · · · · · · · · · · · · ·		

,			
	·	. 	
			*
		-	
			
			4-
•		·	
			
	·	Recommen	dations
	· · · · · · · · · · · · · · · · · · ·		
			·
•			
Rober	7 M. G	lazier	Robert M Alaxia
	Printed Name		Signature

GOIder	Associates Inc.
--------	-----------------

s In <u> </u>	<u>20</u> Time Out_	Au file	weather dew n. HzS defec	Temp. <u>60°F</u> Wind D. <u>E/NE</u> v <u>2</u> Serial No
bration Ga	1 / f n		Instrument Reading	N/A Span/Gain/RF Setting
	ation . # more tha	n one instrumen	t is used, document calibi	ration procedures and results for each additional instrument trument used (eg. OVA, 381, OVM, etc.) for each observa
ime	Station	instr. *	Reading (p)	Procedure/Observations/Comments
04	4	<u> 425</u>	0000	no noticeable odor
IL.		_ H25_	0012	
20	3	<u> </u>	007,1	
<u> 39.</u> .	5	<u> #25</u>	$\frac{O_i O_i O_j I_i}{I_i}$	
<u>15</u> .	<u> </u>	- 425	<u> </u>	
<u>.</u>		<u> 425</u>	0022	
<u>o</u>	<u> </u>	<u> 1478</u>	<u> </u>	
	·			
 -				
				
·············				
			:	
				•
				·
	 			
	·			·
			Recommendat	lons
<u> </u>				

(G/A) G	iolder Associ	lates Inc.
Job Name	Industri-P Woburn	lex Pre-
Location -	Woburn	MA

		·	Data 4/24/90 short	/ /
Inh Nama Ira	lustri-Plex Pro	e- Design Investigation	Date 4/24/90 Sheet_ Job Number 893-6253	~01 <u>/</u>
Location L	loburn MA		•	
Time In 0645	Time Out 1700	Weather Sunny	Temp. 270°F Wind D. NE	V~5-10,00
Instrument Type	Joine Au film	```	Serial No.	
			SparvGain/RF Setting _	
	T wore than one ins	trument is used, document calibration	n procedures and results for each additional in	เล้ากดกบุงเล
Ti-s	recommendations se Station "in		entused (eg. OVA, 381, OVM, etc.) for each (Procedure/Observations/Commo	•
1233	3 42	str. * Reeding <u>ろ 33,1083.2ン // 8 /</u>	aticable order	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1236	9 H2	5 30,1,0		. '
1246		5 000		·
1250	H ₂			· · · · · · · · · · · · · · · · · · ·
1313		5 0,000		
1323		5 0,00 p		
	T J.:		<u> </u>	
			. 9 ⁻ 6.	·
				
 				
				
				
				
				
-				
			ž.	'
		Recommendation	8	-
		·		
4				
				····
0-1	11 (1:		Robert M Hazie	·
konert /	M. Glazier Printed Name	· · ·	Signature	· · · · · · · · · · · · · · · · · · ·



				Date 4/20/90 Sheet / of /
Job Name	Industri-Pu	ex Pre-	Desyn Inv	estigation Job Number 893-6255.5
Location	Waburn M	\ k		
Time In _0%	Time Out	1760 1	Weather ow H	closely Temp. 60°F Wind D. South V ~15 mpl
Instrument T		Au film	Has de	tector Serial No.
	• • • • • • • • • • • • • • • • • • • •	4		dingSparvGairvRF Setting
and Concent	ration . If more than	one instrument	is used, document	calibration procedures and results for each additional instrument in
	recommend	tions section b	elow and indicate th	e instrument used (eg. OVA, 381, OVM, etc.) for each observation.
Time	Station	instr.	Reading (A	Procedure/Observations/Comments
1350	3	<u>H25</u>	0,00	andy no noticable alar
1355	4	<u> </u>	000	
1400		_ H25_	0,00	
1405		45	000	A DATE OF THE PARTY OF THE PART
1413	3	H25	000	
1418		H25	0.00	11
1425	7	H25	0,00	is (directly downwind from
				drill My on Mg on east hide
				pile: ~ too 14 mb away
				property)
		·		A Company of the Comp
				
				
				
				
		 '		
				
		-		
				4
				
				
		_		
· · ·				34
	•	•	Recommen	ndations
	·			
	.	· .		
11	11 //			Olem Mo
Robe	of M. Gla	rier		Robert M Huzier
THAT	Printed Nam	۵ .	-	Signature



				Date 4-22-90 Sheet / of /
Job Name_	Industri- Aex	Pre-1	lesign Inve	Stigation Job Number 893-62555
Location -		A	\circ	
	45 Time Out 17	<i>∞</i>	Weather Son.	Temp. 760 F Wind D. V Month
Instrument	1			elector Serial No.
Calibration (. /^			iding NA Span/Gain/RF Setting MA
	tration • # more than or	e instrumen	l is used, document	calibration procedures and results for each additional instrument in
	recommendalx	ens section d	elow and indicate t	ne instrument used (eg. UYA, 301, UYM, etc.) for each doservation.
Time 133⊅	Station 3	Instr. *	Reading	no notrcible orlor voy little alor
/		11:00		at drill de
1335	4	H25	00.0	
1345	7	H25	00.1.1	A Same of the second
350	2	425	000	\mathcal{N}
1400	5	#25	0,0,0	
1402		1/25	000	<u> </u>
1910	7	#25	المرق	
1472	bohind Bugs Burger,	H=5	00122	downward directly a few hunted
	Oindee Park			yards from drill rig on
1428		H25	(1 / /	was 2,96 at start of round winds
100		1772	000	from south
				3004
				
				
	·			
			 	
				
		***************************************	***************************************	

			Recomme	ndations
		·		
			·	
Robo	+ M. Glazi	~~		Robert M. Harles
M. dimber	Printed Name			Signature

$\left(\left(\frac{1}{2}\right)\right)$ Gold	er Associate	s inc.					RING DAT	
Job Name Location	-Justri A	ex Pre	Desyn In	yestia:	Date ation John	4-23	-90 Sheel- 993-6253	1 01 1
Joo Name	Makers	MA		0	VUU 1			
Time In 663		700	Weather_Sun		T	~60°F	Wind D NE	1 2/0-15m
		4 6/	H25 detecta	J _M	rem). 	N/A	- V <u> </u>
Instrument Type		AU FIIM	_	•	A //IL	! No		1.11
Calibration Gas			Instrument Rea		/V/A	Span/Gair	vRF Setting	NIA
and Concentrati	On *# more than o	nemuniani end	nt is used, document below and indicate t	t calibratio he instrum	in procedures at	nd results for DVA 361 COV	each additional i M. etc.) for each	กริบบทยก) เก กอสรงกระกา
Time	Station	instr. *	Reading			6. **	tions/Comm	
1157_	3	H25	34877	10	noticeable			
203	4	H25	00		baffe	~ 10	u ,	
1728	3	45	0,00	ho	hoticable	alur		
732	4	H25	6,00		ا در	1. 200 (1. js.)	est est est	
1739	[165	00,41			- T		
1742	2	H25	0,0,0,6		<i>-</i>			
1754	5	425	00,00		17		**.	
1800	6	H25	00,1,2		/ _ ·			
1805	57	1/25	0.0.0.6		~~			
		. 		· · · · · · · · · · · · · · · · · · ·				
				بريطة المباليا ب	·· <u>······</u>			
		· 					,	
	 						,	
	<u>-</u>							
							.'	
					·			
		· 				· · · · · · · · · · · · · · · · · · ·	•	
						·		
						•		
	 	·					······································	
								
								
	· ·				· · ·		······································	*
								
								
						1 ¹ 5		
			Recomme	ngation	15	•		
				-		·	 	

Robert M. Glaves
Printed Name

Robert M Stone



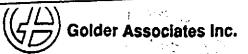
				•
				Temp Wind D V
netriment Tu	700		`1	Serial No
				Span/Gain/RF Setting
raiioration Ga und Concentr	ation succession	one lectorment	resudulatif Dagnuð	rice amondring and ments for each additional instrument
	recommends	vin the cities b	elow and indicate the insi	ation procedures and results for each additional instrument in rument used (eg. OVA, 381, OVM, etc.) for each observation
Time	Station			Procedure/Observetions/Comments
				
	· · · · · · · · · · · · · · · · · · ·			
			•	
			كالمرابع والمراجع والم والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراج	· · · · · · · · · · · · · · · · · · ·
		·		
		- 		
 ,				
	·	• •		
				
		-		
	· · · · · · · · · · · · · · · · · · ·			
 -				
		·		
	·	•		en e
		+ +	Recommendat	ions
_			MACOUNIDICAL	
			·	
	·			
			<u></u>	
	•			



lah Mam-				Job Number
			A1 46	Temp Wind D V
ime in	Time Out	\	weather	remp valid b v
	· ·			Serial No
alibration Ga	s		Instrument Readin	g Span/Gain/RF Setting
ng Concentra	o nadt evom tt * 1701). Italiaemmonen	ne instrument inns section b	is used, document calid slow and indicate the in-	pration procedures and results for each additional instrument in strument used (eg. OVA, 361, OVM, etc.) for each observation
Time	Station	Instr. *	• '	Procedure/Observations/Comments
	CILLIVIT	1119111	noonig.	
				
			,	
				s get des
				•
				•
				
	· · · · · · · · · · · · · · · · · · ·			······································
			Recommenda	tions
				
				
 				
 				
		_		



	Date 4/2/90 Sheet of
Job Name Industri- Plex P/Waburn /M	A Job Number 893-6255,003
	Dobum
Time In 7:00 Time Out 17:30 Weather Cloud	0.4 Temp. 40 Wind D V
Instrument Type H-NU H5263	7 Serial No
Calibration Gas 105 porn 50b Instrument Read	ling # 56 pm SparvGain/RF Setting 8.86
 all to CVIICO(((dtVI) * # more than one instrument is used, document of 	elibration procedures and results lot each additional instrument in
Time Station Instr. • Reading	Instrument used (eg. OVA, 361, OVM, etc.) for each observation. Procedure/Observations/Comments
1355 5-1/100 HAND 0,4 EPM	breathmy the
HZS 0.0 pgn	ルノ機・強いを映
1445 5-1/99	
Hotes 0.3 per	breathing zone
1535 5165 1136 0.1 ppm	
1525 5-1/98 HM 0.3 Por	end at spoon
1620 5-1/97 HUU J-500m	rig exhaust giving high background
H5 6	
16:40 5-1/90 Huy 0.2	
150	
17:30 5-1/89 HNU 0.2	· · · · · · · · · · · · · · · · · · ·
The state of the s	
	dan menden menden menden med der sentre ser sentre ser sentre ser ser ser ser ser ser ser ser ser s
Recommen	dations
Minde Vatas	Ound Hat a
Printed Name	Signature Signature
I HIDA IMIIA	Agligioio



• •			Date 3 April Sheet 1 of 1
Job Name Industri Plex/Wo	buin/MA		Job Number <u>893-6255.003</u>
Location Industri Plan, 1	Nabury,	MA	
Time In OND Time Out	v	Veather <u>Closely</u>	Temp. 240 Wind D V 1500
1-Nu		48	OG 7 Coriol No
Calibration Gas 105 ppm i sob	ntylene 1	nstrument Readi	ng 56 span/Gain/RF Setting 8.85
The state of the s	AND SIND A PAINTING A S		West Strict Friends and a section in the second determine when a contract with
Time Station	instr. •	Reading	Procedure/Qbaervations/Comments
0840 5-1/88	Hic	0-3 april	breaking zone +15=0
0935 5-1/96	HD.	LIDOM	breathing Zame H5=0
8:55 5-1/87	HNU	0.2	
/	<u> #3</u>		
10:15 5-1/86	HNU	0.2	
11100 21/0-	<u>H2</u>	$\frac{1}{2}$	
11:00 5-1 /95	Hu.	<u> </u>	
11:20 3-1/85		$\frac{\omega}{\sqrt{2}}$ -	
11.50 2 1/02	H5	<u> </u>	
13:40 3-1184	HNU	0.2	
	HS		
14:00 5-1194	HNY	0.2	
	<u>H</u> 5	٥	•
			- d.
			
			
	•		· · · · · · · · · · · · · · · · · · ·
		, 3:-:	7 27
•	·		(W)
			112
		Recommend	ations
·		<u> </u>	
			-
			*
C - 1 . V-	1 -		0-11-4
	JES.		Signature



nstrument	7 Time Out	<u> </u>	1.3	Cly demotemp. 4.3 Wind D v
alibration nd Conce	ntration • # more than on	e instrumen	t is used, document (ding 56 Spart/Gain/RF Setting 8.94 calibration procedures and results for each additional instrument in
Time 9どつ	recommendation Station 5-1/93	ns section t Instr. * ダムネ	Reading	Procedure/Observations/Comments
	13	H _z S	Klapa	
7:20	5-1/83	49	<1 ppm	
		H _z S	LIPPM	
9:45	5-1/92	h-d	< 1 pm	
		4,5	< c (fm	
9:55	5-1/82	40	Llepm	
		H2S	KIPPM	
10:50	5-1/91	H2S	CIPPM	
		h 2	<1 ppm	
11:10	5-1/121	h-0	<1 ppm	
		H2S	Llppm	
2:10	5W-1/17L	4, 5	LIggm	
		አ-ን	LIPM	•
Z:25	5W1/17/m	h∂	CI ppm	
		H ₂ S	<u>El epm</u>	
7:40	SW-1/17R	HJS	LIPPM	
		h 2)	Lleam	
15:10	5-1/30	h2S	21 ppm	
1		h-2	<1 ppm	
15:30	5-1/32	H, S	<1 pom	
		H-NU	LI fom	
15:50	5-1/37	H ₂ S	LI pam	
		h-D H2S	21 ppm	
6:35	5-1/33		21 PPM	ė.
		h-o	***Recommen	ndations
				
		,		



					Date 5 April 10 Sheet of of
	Job Name	TSRT			Job Number <u>893-6255</u>
		Woburn, Mars			
	Time In 8	Time Out	\	Weather <u>Sunn</u>	
	Instrument	Type H-Nu	, H23	67 (H2S) /	Serial No
	Calibration (Gas 105 ppm isol	and y te m	Instrument Reading	<u>≤6pem</u> SparvGairvRF Setting <u>8.62</u>
	and Concer	tration • # more than	one instrument	is used, document calibrations and indicate the insti	stion procedures and results for each additional instrument rument used (eg. OVA, 361, OVM, etc.) for each observati
	Time	Station	Instr. *	Reading	Procedure/Qbaeryations/Comments
90	Time 8:36	5-1/38	HNU	0,2	breathing zone
			150	0	
	9:00	39	HNU	<u>0.3</u> _	
			H20		Asserting to the second
	9:19	48	HNU	0.3	
for	- C		H ₂ 5		
<i>ጉ[U-1</i>	201244	47	HNK HNK	<u> </u>	
~	C'Ud	40	<u>H25</u> HNU	0.3	
	4.7		- HXX	0.3	
	10:44	46	HNG	<u> ठ.</u>	
	70 11		45	0	
	11:00	43	HNG	0.3	
			H25	6	
	11:25	42	HALL	0.3	A CAR TO LA CALLED
			H25.	0	
	13:40	36	HNU	0.3	
			4,5	0	
	11:17	45	HUU	<u> </u>	-
			th.5	<u> </u>	
	15:00	27	HNU	<u> </u>	
	Terre		H25		
	5:15	26	HYK	_ حيک _	· · · · · · · · · · · · · · · · · · ·
			H22		
				Danage	
				Recommendati	ons
			 		
		·			
		· · · · · · · · · · · · · · · · · · ·			
	0,12	du Vata	~		andy Unto
	_ Cin	Printed Nam			Signature



Job Name Location WODLYN MA Time In TOO Time Out Weather Cloudy Temp. 35 Wind D					Date 4/6/90 Sheet 1	12
Time In 1/20	Job Name-	15K1	· M n	·	Job Number	
Instrument Type		<u>voburn</u>		nti d	26	
Calibration Gas/OS DPM 1500-0 (AtAnstrument Reading 30 PDM Span/Gain/RF Setting 9.59) and Concentration - It more than one instrument is used, document useff procedures and results for each additional recommendations section below and indicate the instrument useff (Q.V.). 301, (V.V.). 401,	Time In 1:0	Time Out			V	
Calibration Gas/OS PPM 1504-044Anstrument Reading 20 PPM Span/Gain/RF Setting 4.59 and Concentration - 1/1 more than one instrument is used, document calibration procedures and result, for each additional section and instrument used (2014). 81, 191, 191 each doctors recommendations section below and indicate the instrument used (2014). 81, 191, 191 each doctors value in the instrument used (2014). 81, 191, 191 each doctors value in the instrument used (2014). 81, 191, 191, 191, 191, 191, 191, 191,	Instrument 1	Type HDU	H52671	H25)	Serial No	
## Station Input Reading Procedure Input Station Input Reading Procedure Input Input Reading Procedure Input Input Reading Procedure Input	Calibration (3as/05 ppm /	subuct y kanann	ıment Reading	56 PPM Span/Gain/RF Setting 4.	<u>59</u>
Time 8 15 5-1 15 15 15 15 15 1	and Concen	ilration • if more than	one instrument is use	id, document calibr	ation procedures and results for each additional instrum	14 in 9 0
8:18 51/15 HNU 03 breading 700e 8:21 51/14 HNU 0.1 8:28 5.1/17 HNU 0.2 8:37 5.1/18 HNU 0.2 9:30 5.1/7 HNU 0.1 H.S 0 9:43 5.1/11 HNU 0.1 H.S 0 0:05 51/11 HNU 0.2 H.S 0 11:02 S.1/10 HNU 0.2 H.S 0 11:23 S.1/10 HNU 0.2 H.S 0 11:25 S.1/10 HNU 0.2 H.S 0 11:26 S.1/11 HNU 0.2 H.S 0 11:27 S.1/10 HNU 0.2 H.S 0 11:28 S.1/10 HNU 0.2 H.S 0 11:29 S.1/10 HNU 0.2 H.S 0 H:50 S.1/18 HNU 0.2	Time					
8:24 5-1/16 HNu O-1 8:28 5-1/17 HNu C1Z 8:37 5-1/18 HNu O.Z 8:37 5-1/18 HNu O.Z 9:30 5-1/7 HNu O.1 H-S O 9:43 5-1/11 HNu O.4 H-S O 10:45 S-1/11 HNu O.2 H-S O 11:02 S-1/20 HNu O.2 H-S O 11:23 S-1/10 HNu O.Z H-S O 11:23 S-1/10 HNu O.Z H-S O 11:00 S-1/118 HNu O.Z H-S O	9, 15	5-1/15		0.3	breaking tone	,
8:28 5:1/17 HAVE CIZ B:37 5:1/18 HAVE CIZ 14:5 O 9:30 5-1/7 HAVE OIL 9:43 5-1/114 HAVE OIL 10:45 5-1/115 HAVE OIZ 10:45 5-1/115 HAVE OIZ 11:02 5-1/10 HAVE OIZ 11:23 5-1/10 HAVE OIZ 11:25 O 11:25 O 11:25 O 11:25 O 11:25 O 11:26 5-1/1 HAVE OIZ 11:27 O 11:28 O 11:29 5-1/1 HAVE OIZ 11:29 O 11:20 S-1/1 HAVE OIZ 11				0		<u> </u>
8:28 5-1/17 H/W O.Z B:37 5-1/18 H/W O.Z H/S O 9:30 5-1/7 H/W O.1 H/S O 9:43 5-1/114 H/W O.4 H/S O 0:05 5-1/115 H/W O.2 H/S O 10:45 S-1/11 H/W O.2 11:02 S-1/20 H/W O.2 H/S O 11:23 S-1/10 H/W O.Z H/S O 11:24 S-1/10 H/W O.Z H/S O 11:25 O 11:26 S-1/10 H/W O.Z 12:20 S-1/10 H/W O.Z 12:20 S-1/10 H/W O.Z 13:20 S-1/10 H/W O.Z 14:50 O 14:30 S-1/10 H/W O.Z 15:50 O 14:30 S-1/10 H/W O.Z 15:50 O 15:50 O 16:50	8:21	5-1/10	_ HNU _C	2-1 _		
$ \begin{array}{c cccccccccccccccccccccccccccccccc$	48		$-H_25$	<u>_</u>		·
9:30 5-1/7 HNu 0.1 9:43 5-1/114 HOU 0.4 15.5 0 0:05 5-1/15 HNu 0.2 15.5 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 16.45 0 17.50 5-1/10 HNu 0.2 17.50 0 1	8:28	5-1/17	- HIYU -C	<u>Z</u> _		
9:30 5-1/7 HNu 0.1 9:43 5-1/114 HOU 0.4 15.5 0 0:05 5-1/15 HNu 0.2 15.5 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 15.45 0 16.45 0 17.50 5-1/10 HNu 0.2 17.50 0 1	0107	6-17:0	- 4-5	<u> </u>		 .
9:43 $5-1/114$ 410 0.4 410 0.5 $0:05$ $5-1/115$ 410 0.2 410 0.2 $11:02$ $5-1/10$ $11:02$ 1	0-0-	5-1/10	- # Na - C	<u></u>		·
9:43 5-1/114 HAU 0.4 $0:05 5-1/115 HAU 0.2$ $10:45 5-1/11 HAU 0.2$ $11:02 5-1/10 HAU 0.2$ $11:23 5-1/10 HAU 0.2$ $11:25 0$ $11:20 5-1/118 HAU 0.2$ $11:50 5-1/118 HAU 0.2$	9:30	21/2	- 133 -	5 -		
$9:43 5-1/114 HOU 0.4 H_2S 0 0.05 5-1/115 HNU 0.2 H_2S 0 0.45 S-1/11 HNU 0.2 H_2S 0 0.2 $	1,50	5.7.7	- Limited Security -	~~ -		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	G:43	<-1/114		4	The second secon	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	died Manage			<u> </u>		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10:05	5-1/115		2	,	
$ \begin{array}{c cccccccccccccccccccccccccccccccc$			H ₂ S	0		
$ \begin{array}{c cccccccccccccccccccccccccccccccc$	10:45	5-1/11	HNU C	ر ح		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			H ₂ S	Δ		
$ \begin{array}{c cccccccccccccccccccccccccccccccc$	11:02	5-1/20	HNU C	12		
$ \begin{array}{c cccccccccccccccccccccccccccccccc$		-	H_25	<u> </u>		
5-1/1 #104 0.2 #:00 5-1/118 #104 0.2 #:30 5-1/120 #104 0.2 #:55 0 #:55 0	11:23	S-1/10	HNU O			·
14:30 5-1/18 HOU 0.2 14:30 5-1/120 HOU 0.2 Has Commendations	13130		H_2S	<u> </u>	ekt z	
14:30 5-1/18 HOU 0.2 14:30 5-1/120 HOU 0.2 Has Commendations		5-1/1	- #10u -0	<u>-</u>		
14:30 51/120 HAU 0.2 H25 Commendations	2/1.5	7.700	- 425	<u> </u>		
H ₂ 5 Commendations	<u> 74:00</u>	5-1/110		<u> </u>	· · · · · · · · · · · · · · · · · · ·	
H ₂ 5 Commendations	11.20	8-1 /100		느		
	14.00	51/120	. HIVA C			
			H25	recommenda:	ions	
والمنظور والمنظور والمنظور والمنظور والمنظور والمنظون والمنظون والمنظور وال		· •	The state of the s	F. W.		
						
				·		
						
Conduction Children	<u> </u>	ا ـا ا . اــ	~=		O' (Line	
cinquates cinquation		ray yat	52	<u> </u>	may yus	



	<u> </u>	<u> </u>	Veather	TempWind D V
strument '	Туре		<u>`;</u>	Serial No
alibration (Gas		nstrument Readir	ng Span/Gain/RF Setting
d Concer	ntration • _{If more than}	one instrument	is used, document call slow and indicate the k	ibration procedures and results for each additional instrument in astrument used (eg. OVA, 361, OVM, etc.) for each observation
Time 5:00	Station 5-1/117	Instr.* HNG	Reading	Procedure/Observations/Comments
		H25	0	
15:10	5-1/119	HNU	0.2	
		H-5	<u> </u>	
5:44	5-1/116	- HNu	0.2	
6:11	5-1/24	- H25		
<u> </u>	91127	45	<u> </u>	
				
				<u> </u>
				
			 	
		 .		:
				
				· · · · · · · · · · · · · · · · · · ·
		-, ·		· · · · · · · · · · · · · · · · · · ·
· .		·		**
			Recommenda	Rions
· - · · · · · · · · · · · · · · · · · ·	. ·			
				



	Calibration	Type HNU 10.5 Gas 105 ppm 150k stration * # more than o	ndeline	15 meter Instrument Read	Serial NoSerial NoSerial NoSpanVGainVRF Setting 9.50 cellibration procedures and results for each additional instrument e instrument used (eg. OVA, 361, OVM, etc.) for each observati
	Time 8:15	recommendate Station	ions section b Instr. * HNU	Reading	Procedure/Observations/Comments Procedure/Observations/Comments
	8:43	3-17 B	H2S HNU	0.2	Sample retrieving
	9:08	5-1/19	HVA HV2	0.2	
	9:57	5-1/44	417A	0.2	
30	10:45	5-1/105	1/1/4	0.2	
	11:36		HIYU	0.2	
	11:45		HN4 1+, 5	0.6	
	11:56		HLLU Hzs.	0.8	
.00	12:05		HNU	0.2	
	10:15	5-1/54		0.2	
		***************************************		0	
· -;				0	
				Recommen	ndations

(SD) Go	lder Associate	s Inc.		AIR MONITORING DATA SHEET
$\overline{}$				Date 4/8/90 Sheet / of /
Job Name	15R1		· 	Job Number 893-6255, 00-
Location _L	Johura_	<u>MA</u>		
Time In 7:0	OTime Out	\	Weather <u>54</u>	<u> </u>
	ype HNU		`4	Serial No
		sbutukne	Instrument Rea	iding 64 SparvGain/RF Setting 10.0
and Concenti	ration • # more than o	ne instrument	is used, document	calibration procedures and results for each additional instrument in
	recommendat	ions section b	elow and indicate t	ne instrument used (eg. OVA, 361, OVM, etc.) for each coservation.
Time 8:77	Station	Instr. *	Reading	Procedure/Observations/Comments
D-17.	2-1/101	11/19		
8:36	5-1/103	HNU		
0.00	J=17 103	#14	- 6	AND THE SECOND SECOND
$\overline{Q(Q)}$	Barbar	HALL	0.6	
<u> </u>	5-1/64	H-5	0	
9:20	5-1/65	HNU	0.6	
سيستگيمل		H25	0	
10:15	3-1/74	HNU	0.2	
		H25	6	
10:30	5-1/15	HNU	0.3	2.29.40
		H25	0	
11:10	5-1/72	HNU	6.2	
 .	<i>'</i>	145		
#139.	5-1/73	HNU	<u>0,Z</u>	
 .	5 /	125		
12:00	51/77	11/4	05	
1010	6 : /	1725	0	
13:20	5-1/55B	HVA	02	· · · · · · · · · · · · · · · · · · ·
101/10	01170	$\frac{H_2}{H_2}$		
13:40	3-1/78	#\\\\	0.2	
	"	1753		
			<u> </u>	
		·		
	<u> </u>	· 	Recomme	ndetione .
			Terminini)	
			<u> </u>	
•		<u></u> .		
				
	 			

Cindy Printed Name

Cencly yetes

J Signature



		Date 4 9 90 Sheet ol
Job Name ISRT	·····	Job Number 893-6255.00
Location Woburn	MA	
Time In 7:00 Time Out_	Weather 5U	nn y Temp. 35 F Wind D v
Instrument Type HNU P	IIOL #5267	Serial No.
Calibration Gas 105 Dom: It	Sobut denement Re	eading 6-3 Span/Gain/RF Setting 100
and Concentration * # more tha	n one instrument is used, documer	nt calibration procedures and results for each additional instrument in
recommen	dations section below and indicate	the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time Station 8:12- 5-1/70	Instr. * Reading	Procedure/Observations/Comments
812 5-1/70	<u> HNU OZ</u>	Breathing time during
9:00 3-1/80	HNU OLZ	arming + 10 creoca
3.00 0 1700	H3 772	Markey Consider the
9:20 5-1/8/79	1 H/4 O.Z	
	31 HS 0	
10:00 5-117	10 HN4 0.2	
	<u>H5 0 </u>	
10:40 5-1/51	_ HNU <u>0,2</u>	
· · · · · · · · · · · · · · · · · · ·	_ HS _O	
11:00 5-1/52	THU 0.2	
11:10 61/52		
11:18 5-1/53	<u> </u>	
11:40 3-1/56	HALLAZ	•
11.10 2-17.00	- 111/4 - O	
12:15 3-1/57	HNG 0.2	
	HS 0	
2:35 5-1/58	HN4 0.7	
	HS O	3 - 4
3:45 5-1/10	HM 0.2	
	<u>HS 0</u>	
· · · · · · · · · · · · · · · · · · ·	HILL	
· · · · · · · · · · · · · · · · · · ·	_ <i>H</i> 5	
· · · · · · · · · · · · · · · · · · ·		
•	Recommo	endations
		A CONTRACTOR OF THE PROPERTY O
O direct Ment	- Service Control	7 1 4
Cynthia Yell		La Valu



<u> </u>				Date 4/10/90 Sheet 1	a /
Job Name	ISRT			Job Number 693-6255	2003.
	Noburn	MA			
	OO_Time Out		Neather SUNY	windy Temp. 50 Wind D V.	
-	Type HNU		45	Serial No	
hatiometri Salibration (325 1050m 1501			56 Span/Gain/RF Setting 8	72
and Concen	tration · # more than o	ne instrument	is used, document calib	oration procedures and results for each additional instru	ment in
	recommendat	tions section b	elow and indicate the in	strument used (eg. DVA, 361, OVM, etc.) for each obse	ryation.
Time 8:15	Station ろー1/1(し	instr.*	Reading C.Z.	Procedure/Observations/Comments	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
0-12	2-1/11	HNU HS			
9:00	5-1/112	HNU			
		H5_	0	A SA SA	
8:45	5-1/113	HNU			
		<u>H</u> 5	<u> </u>		
10:36	5-1/62	HNU	<u> </u>		
10:00		<u>#5</u>			
10:55	2-1/61	HNU	<u>~</u> _	•	
(:32	5-1/60	<u>H3</u> HNu	0.2-		
1-52	01/60	H5	- -		
12:30	5-1/59	HNU	0.2		
0 30	0 11 21	H.			
3:30	5-1/104	HNU	0.Z		
	7	H5_	0		
3:50	JW-1/51	HNG	0.2		
	7	<u>H5</u>			
					·
				· · · · · · · · · · · · · · · · · · ·	
					
					
					
			Recommenda	tions	
Cin	dy Yate	25	•	Circles Yates	
*******	Printed Name			Signature	

Time In I	WOOUTO OU Time Out Type #Nu	V	Weather	Serial No
Calibration (Gas 105 Dpm 150	sputulau	Instrument Rea	ding 56. Span/Gain/RF Setting 10.0
ind Concer	itration <i>• if more than o</i>	ine instrument	is used, document	celibration procedures and results for each additional instrument in a instrument used (eg. OVA, 301, OVM, etc.) for each observation.
Time 9:10	Station	instr.*	Reading	Procedure/Observations/Comments brea hing zone dwing
		<u>H3</u>	0	retremail of sample.
0:53	SW-1/50	HNU	0.2	
3. 3x	2/3/755	45		
<u>ට:වර</u>	SW1/23	HNY	$\frac{Q}{A}$	
	-	<u> </u>		
				
		· ——		
				
···		·		
			,	
	<u></u>		· · · · · · · · · · · · · · · · · · ·	

~				
			Recommen	ndations
		·		



				1/11/90 0 1 1
	TENT			Date 4/16/90 Sheet 1 of 1
Job Name_	1. 12/10/15	me	}	Job Number 89.3-6255, 003
Location				2011 - 55 12
	30 Time Out	\	Weather ユム	004Temp. 55_Wind D V
Instrument 1	Type HNU		H:5	Serial No.
Calibration (Gas <u>(05 ppm /50</u>	<i>bustyleni</i>	Instrument Re	ading 6.2 Span/Gain/RF Setting 10.0
and Concer	IlfallOff * If more than o recommendati	ne instrument ons section b	is used, documen slow and indicate	it calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time //3.20	Station 5-1/29	Instr.*	Reading	Breathing Cone
440		H-5	0.	
11:40	5-1/31	HNU	0.4	
		45		
10	5-1/35	HNU	0.3	
12101		<u>H5</u>	$\frac{2}{0}$	
10:34	5-1/34	HÃU	<u>0.3</u>	·
<u> 13:35</u>	E-1/10	175 1701a	A 2	· · · · · · · · · · · · · · · · · · ·
<u>D.35</u>	5-1/4-1	1774	0.2	
H:15	5-1/50	HNU	0.5	96.50
11.	- 1/ 5 0	#3	0	
14:50	3-1741	HNU	0.2	
		#5	0	
				·
				
				
			···	
			-	
				:
			Recomme	andations

Cin	du Yak	05	,	Cindy Utiles
	Printed Name			Signature

Golder Associates Inc.

and Concent	ration • # more than o	ne instrument i	is used, document ce	ng 6.2 Span/Gain/RF Setting 10.0 Span/Gain/R
7ime 8:10 8:30	Station 5-1/6	Instr.* HNu HNu	Reading 0.2	Procedure/Observations/Comments Brea-wing zone
8:52	5-1/13	175 175 175	0.2	
9:25		HNU HNU HNU	0.7	
1:50 3:09		HYU	0.8	
		<u>H5</u>		
			Recommend	ations



	·			Date 4/18/90 Sheet / of /
Job Name_	ISRT			Job Number 893-6255
Location -	Woburn	MA	}	
	15 Time Out L	5:00 v	Veather SUL	100 Temp. 40 Wind D V
	Type HNU		45	Serial No.
lalibration (Gas/05mm 150	butelene	nstrument Re	ading 5.6 SparvGain/RF Setting 9.88
and Concer	ntration • # more than o	one instrument	is used, documen	t calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
				The state of the s
Time 8:15	Station 5-1/63	instr.* HNU	Reading	Procedure/Observations/Comments Breathing Zone
<u> </u>	5-1765	HS 11/4M	<u> </u>	Trewring Boises
3:37	3-1/66	HNu	1), 2	
		HS	0	
0:38	SW-1/26	HNU	0.2	
		. <i>H</i> 5_	0	
3: <i>15</i>	SW-1/71	HNU	0,2	
12.26	4(2) 1/70	HNU HNU	0	
3:36	JW-1/72	. <u>1174</u> H5	<u> </u>	
13:53	5W-1/73	HNU	0,2	
	S-25	#3	0	
4:25	SW-1/74	HNU	<i>ර</i> ්.3	
		#5	0	
<u> 14:44</u>	SW-1/75	HNU	<u>08</u>	
		. # <u>5.</u>		
		· ·	 	
	•			
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
		• ••••••••••••		
	-			
				414
			Recomme	ndations
				
	<u> </u>			
				
010	du Yate	2~		Cod . 160.
- Birman	Printed Name	<u></u>	•	// Signature

		older Associate	s inc.		AIR MONITORING DATA SHEET
	4-5-81	ISRT			Date 4/19/90_ Sheetot/ Job Number 893-6255
	Job Name Location	Woburn	, m	A	000 (10)
		OO_Time Out		Veather 50	004Temp.55_Wind D V
				-5	Serial No.
•		Type #NU			50
		Gas OSpon 130			calibration procedures and results for each additional instrument in
		recommendati	ions section be	low and indicate t	he instrument used (eg. OVA, 381, OVM, etc.) for each observation.
_	Time 8:35	Station SW-1/76	Instr.* HNu	Reading 0.4	Procedure/Observations/Comments
-			<u>H5</u>	0	
7:15	8:55	SW1/TT	HNG.	03	
	9:07	JW-1/78	HNU	0.3	
	K):/5	5W-1/79	45 #NG	0 0,2	
		· ·	<u>#5</u>	0	
4	12:30	<u> </u>	HNU	0.2	
	1011	3000	H S .	<u>/.O</u>	
₫.	12:45	<u>00-1/02</u>	$\frac{HNG}{US}$	<u> </u>	
\smile	13:00	30-1/83		0.2	
.mi	<u> </u>	00 1100	H2.	1.0	
-			HAG		
اندر	كالبديد بالمنافقة		45.		
-			HAG.	· · · · · · · · · · · · · · · · · · ·	
,					
•		***************************************		·	
					
•					
#					
					
				Recomme	ndations

Cindy Vates
Printed Name

Crody Gates Signature

Golder Associates Inc.	
------------------------	--

				Date 2/20/90 Sheet of of
Job Name_	ISRT			Job Number \$93-6255
Location _	Woburn	∞	A	
Time In 6:	45_Time Out		Weather SUNC	VTemp. 50 EWind D V
Instrument 1	Type HNU		H5	Serial No.
Calibration (Gas <u>(05 ppm 150 bu</u>	Here	Instrument Read	ing 56 SparvGain/RF Setting 10.0
and Concer	tration • # more than or	ne instrument	l is used, document of elow and indicate the	libration procedures and results for each additional instrument in instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time	Station	Instr. *	Reading	Procedure/Observations/Comments
8:36	5W-1/BR	HNU	0.2	Breathing core
		<u>H5</u>	0	
<u>8:57</u>	5W-1/18M	HNU	0.2	N2: 5
	5.1.7.04	<u>#3</u>		No. 1 of the second sec
9:17	SW-1/18L	HNu	0,2	
10:00	360-1/196	HS UNIC	0 -	
10-00	JW-1/196	<u> </u>	0.6-	
11:00	\$5-1/106	HNG	0.2	
17.00	-7100	H5	0.2	
10:15	5421/84	HNG	0.3	
		H5		
12:30	5W-1185	HNG	0,2	
***************************************		<u> 45</u>	<u> </u>	
13:00	56-1/86	HNU	0.2	Karana da Arana da A
		#5		
13:20	JU-1/87	HÝM	D_{2} .	
73.75	2 1/00	#5		
<u>[3:40</u>	20-1/20	HIV	02.	
1/20	5 11/00	#	<u> </u>	
14:00	52-1/89		0.7	
		HS_		
				:
			Recommend	iations
		_		
			·	
Cin	ky to	5		Candy Hater
	Printed Name			Signalura

_				Date 4/23/90 Sheet / of /
Job Name_	ISRT		·	Job Number <u>893-6255</u>
Location 1	Whurn	MA		
Time In 6:	30_Time Out		Weather <u>Sun</u>	04Temp. 65 EWind D V
Instrument 1	Type #Nu	#3		Serial No.
Calibration (Gas <i>(05ppm_150h)</i>	tylene.	Instrument Rea	ading 56 Span/Gain/RF Setting 9.34
and Concer	itration • # more than o	ne instrumen	t is used, document	calibration procedures and results for each additional instrument in
Time		o <i>ns section t</i> Instr. •	Reading	he instrument used (eg. OVA, 361, OVM, etc.) for each observation. Procedure/Observations/Comments
Time 8:18	JW-1/90	HN4_	O.Z	
·		HS_	0	
8:27	SW-1/91	HNU	0.2	
		H5_		
8:53	SW-1/92.	HNU	0.2	
2100	(00)	43	<u> </u>	
4.26	560-1/96	HX.1	0.2	
9:41	5w-1/98	H3.	0.23.0	n ent of soon
1.10	30-470	H5	0, 23.0	uran or sport
10:17	5W-1/100.	HNU	0.2	
20.1.2		H5		
10:25	5W-1/102	HNU	0.2	
		HS.	0	
10:42	5W-1/101.	HNU	3.0	m and 27 50000
		H5.		
11:30	SW-1/104	HNY	<u>0, Z</u>	
111.19		#5	4_	
11:40	SW-1/103	HNU	0,2	
72:15	4) (0)	#3	$\frac{\sqrt{2}}{\sqrt{2}}$	
0:12	20-1/105	#NY4	0.2	
12:52	JW-1/106	110 H	02	
12.52	<u> </u>	# \\	مح	1
13:48	51-2-1/108	HAV	0.2	·
	002 17100	H5	Recomme	ndations
		-,-	<u></u>	
			·	
Cin	du Ya	te5	# # # # # # # # # # # # # # # # # # #	Cinder Chita
	Printed Name	<u> </u>		Signature /

Golder Associates Inc.

Name		,			112/62 1 1
ncation Woburn MA me In & SO Time Out Weather Sunny Temp & Wind D v strument Type HNU HS Serial No. alibration Gas! OSppm ISOh Utu! (CUARtenument Reading TO Span/Gain/RF Setting IO O dd Concentration ** improvement is used, document cabination procedures and results for section debtored indicates the instrument used (e.g., VM, 31), VM, etc. it., doctional instrument is used, document cabination procedures and results for section debtored indicates the instrument used (e.g., VM, 31), VM, etc. it., doctional recommendations section below and indicates the instrument used (e.g., VM, 31), VM, etc. it., of each observation. Time Station Instr.* Reading Procedures/Observational/Comments B: 10 SW-1/110 HNW O.7 HS O B: 26 TW-1/111 HNW O.7 HS O HNW HS HS HNW HS HNW HS HNW HS HNW HS		7.00			Date 4/24/20 Sheet / of /
me In E. 50 Time Out Weather SUNY Temp (SE Wind D. V strument Type HNU HS Serial No. salibration Gas 05 ppm 150 hutu/dustrument Reading 70. SparvGairvRF Setting 10.0 and Concentration * if more than one instrument is used, document calibration procedures and results for each additional instrument is recommendations section below and indicate the instrument used (eg. 01/4, 31, 01/4, etc.) for each observation. Time Station Instr. Reading Procedure/Oppervations/Comments 8:10 50-1/110 HNU 0.2 HS 0 1:15 50 500-1/111 HNU 0.2 HS 0 1:15 50 500-1/112 HNU 0.2 HS 0 HS 0 HNU H	ob Name_				Job Number & 7.3-6655
strument Type HNU HS Serial No. salibration Gas 05 ppm 150 but ulustrated the strument Reading 70. SparvGain/RF Setting 10.0 and Concemitation ** it more than one instrument is used, document calibration procedures and results for each additional instrument is sealing instrument is sealing instrument used (eg. 014, 381, 014, 416, 51, 014, 416, 51, 014, 416, 51, 014, 416, 51, 014, 416, 51, 014, 416, 51, 014, 416, 51, 014, 416, 51, 014, 416, 51, 014, 416, 51, 014, 416, 51, 014, 416, 51, 014, 416, 51, 41	ocation				
alibration Gas O Som I Schut (24 this trument Reading TO: Span Gain/RF Setting IO: O the Concentration of the procedure of the concentration of the conc			\		1
de Concentration * y more than one instrument is used, document calibration procedures and results for each additional instrument in recommendations section before and indicate the instrument used (eg. QVA, eg.) QVA,	nstrument '	Type HNU			
Station Instr. Reading Propedure (Deservations/Comments B. 10 54) - 1 / 110 M/4 0.7 Breath observations/Comments Breath of the comment Breath of the com	alibration	Gasl <u>05ppm 150</u>	hutylery	Histrument Read	ling 70 Span/Gain/RF Setting 100
Time Station Instr.* Reading Procedure/Observations/Comments 8:10 5W-1/110 ANW 0.7 HS 0 8:26 7W-1/111 HNW 0.7 HS 0 8:150 5W-1/112 HNW 0.7 HS 0 8:335 5W-1/114 HNW 0.2 HS 0 HNW HS 0 HNW HS 0 HNW HS HNW HS 0 HNW HS HNW HS 0	nd Concer	itration - # more than or	ne instrument	is used, document or	alibration procedures and results for each additional instrument in
8:10 5W-1/110 BING 0.7 Breathing 70000 8:26 9W-1/111 HNG 0.7 HS 0 8:15 9W-1/113 HNG 0.7 HS 0 9:50 5W-1/112 HNG 0.7 HS 0 3:35 5W-1/114 HNG 0.2 HS HS HNG HS HS HNG HS HS HNG HS	Time			•	
#\$ 0 #\$ 0 #\$ 0 #\$ 0 #\$ 0 \$\frac{1}{13} \frac{1}{13} \frac{1}{14} \frac{1}{12} \frac{1}{13} \frac{1}{14} \frac{1}{12} \frac{1}{12} \frac{1}{14} \frac{1}{12} \frac{1}{14} \frac{1}{14} \frac{1}{12} \frac{1}{14}	_			O.Z.	Breathing 7000
1.15 3.1-1/113 HN4 0.7 HS 0 1.50 5.2-1/112 HN4 0.7 HS 0 1.335 5.2-1/114 HN4 0.2 HS 0 HN4 HS HN4 HS HN4 HS			HS.	<u> </u>	
1.15 3.1-1/113 HN4 0.7 HS 0 1.50 5.2-1/112 HN4 0.7 HS 0 1.335 5.2-1/114 HN4 0.2 HS 0 HN4 HS HN4 HS HN4 HS	3:26	JW-1/111	<u>HNY</u>	0.7	
1. C) 5W-1/112 HNU 0.2 H5 0 3.35 SW-1/114 HNU 0.2 H5 0 HNU H5 HNU H5 HNU H5			<u> 45</u>		
550 5W-1/112 HNU 0.7 HS 0 :3:35 5W-1/114 HNU 0.2 HS 0 HNU HS HNU HS HNU HS	1.15	50-1/113	HNU	<u> </u>	
3:35 SW-1/114 HNU O.2 H5 O HNU H5 HNU H5 HNU H5	2166	51.3 1/115	<u>H5</u>	_ <u></u>	
3:35 SW-1/114 HNU O.2 HS O HNU HS HNU HS	1.50	200-11112		<u>0,7 </u>	
HS HNU HS HNU HS	2.25	3/2-1/11/		~~ .	
	2:32	JW-1/114		<u> </u>	<u> </u>
					
					
			H5		
			1		
					•
					
			-		
					
Cindy Vates Cander Upto					
Cindy Vates Cender Upto				Recommend	dations
Cindy Vates Cender Yets					
Cindy Vates Cender Yets					·
Cindy Vates Cender Yets			 		
Cindy Vates Cender Yets	, 	· 1			
Cindu Vates under Voto		<u> </u>			
	<u> </u>	ndy Yate	25		Under Goto



	Instrument	Type HNU		H5.	10udy Temp. 60 Wind D V
	Calibration (and Concer	itration • if more than on	e instrumeni	t is used, document :	ding 56 Span/Gain/RF Setting 9.6 calibration procedures and results for each additional instrument instrument used (eg. OVA, 361, OVM, etc.) for each observations.
	Time 8:35	Station SID-1/115	Instr.*	Reading 0.3	Procedure/Observations/Comments Breathing Tone
	8:55	562-1/17	HŽ HŽ	0.3	
0	8:50	30-1/116	HV HV HV	0.3	
	9:25	37-1/118	HNU HS		
	12:45		45		
	13:10	5W-1/52L	地		
	0:00	±20-1/52R	#2"		
			·		
				Recommer	detions
				1.00011111101	



_			Date 5 14 90 Sheet 1 of 1
Job Name	ISRT		Job Number 893 - 6255
Location _	Woburn	MA	
	30_Time Out	Weather Show	dy Sunny Temp. 65 EWind D V
Instrument	Type HNU	ዜ5	Serial No
Calibration	Gas 105 ppm 150b	<u> Aulone.</u> Instrument Re	ading 58 Span/Gain/RF Setting 10.0
and Conce	intration • # more than o	ne instrument is used, documer	nt calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time	Station	Instr. * Reading	Procedure/Observations/Comments
9:30	5W-1/17R	HNu 0.3	Breathing rone + at end of
	·	<u>#5_0_</u>	Spoon.
<u>9:35 </u>	56-1/17m	#Nu 0.2	
D:15	SW-1/17L	HUL OIZ	
17.17	<u> </u>	HS 0	
12:45	5W-1/6L	HNU 0.2	
		<u>tts</u> 0	
D:58_	5W-1/6m	#Nu 0.2	
13:15	50-1/6R	HS 0.2	
10.10	Justak	#5 O	
		-	
			
	·		
····	<u> </u>		
			
	·		
		Recomme	endations
			
			
<u> </u>	-1, \1-	<u></u>	0-4 1-4
MS 48 HAVESHEE	Printed Name	167	Signature

	Date <u>5/15/90</u> Sheet of
Job Name TSRT	Job Number 893-6255
Location Woburn MA	
Time In 7:00 Time Out Weather 400	10 V V V V V V V V V V V V V V V V V V V
Instrument Type #Nu H5;	Serial No.
Calibration Gas 105 1500uty kne Instrument Rea	
and Concentration • If more than one instrument is used, document	calibration procedures and results for each additional instrument in
	e instrument used (eg. OVA, 361, OVM, etc.) for each observation. Procedure/Observations/Comments
Time Station Instr.* Reading 8:75 500-1/54 HMu 7.7	Broathing zone - end o
H5 0	50000 · · · · · · · · · · · · · · · · ·
8:40 SW-1/5M HUU 0.7	
HS 0	
9:05 SW-1/5R HUN O.Z	
10:16 2:21.11:00 141. 2.3	
10:15 SW-1/4M HYU O.Z	
10:30 5W-14L ANU 0.2	
#5	
10:50 SW-1/4R HNU 02	
H5_O	4 3
11:50 QN-1/3R HN4 O.Z	
<u> </u>	<u> </u>
12:10 5w-1/3m HN4 0.2	
13.11	
13:14 50-1/31 HNG 0.2	
14:10 5W-112 HNV 0,2	
11.10 SW 110 HAV 0.2	
· ·	
Recommen	idations
	
	Name of the Control o
0.1.164=	and the
Printed Name	Signature
rinieg name	

$\left(\begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \end{array} \right) \begin{array}{c} \end{array} $	older Associate	s inc.	Date 5/16/90 Sheet / of /
Job Name_	ISRT	MA	Job Number
Location _			15
	OO Time Out	——Weather Clo ★ H S	α
Instrument	Type Wil		Serial No.
Calibration (Gas 165 ISODUTU	Instrument Re	eading 58. Span/Gain/RF Setting 10.0
and Concer	III ation - if more than or necommendati	ne instrument is used, docume ons section below and indicate	nt calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, QVM, etc.) for each observation.
Time	Station	Instr. * Reading	Procedure/Observations/Comments
9:30	50-1/7R	HNU DIZ	Breathing zone a end of
		HS 0	SDIT SECO
9:45	5W-1/7M	HNU DIZ	
		H3 0	· · · · · · · · · · · · · · · · · · ·
12:25	SW-1/7L	Hu O.2	
		H3 0	
14:25	56-1/1	HVu 0.4	
		H3 0	e de 🐓 e e exe
			and the
		\(\frac{1}{2}\)	
			•
			
			

	Recommendations		
Cindy Yates Printed Name	Cu	rdy Yato	
Prihted Name		(Signature	

(G_D^{\triangle}) Go	older Asso	clates Inc.
------------------------	------------	-------------

		Date 5/17/90 Sheet of		
Job Name TSRT		Job Number 893-6255		
Location LOCOLUM	MA	·		
Time In TICO Time Out	Weather	Temp. 6.0 V		
Instrument Type HOL	H5	Serial No.		
collection of 98, 5000 15	التناسطات سلسطات الماليات الماليات	ading 62 Span/Gain/RF Setting 10,0		
and Concentration	variated dustriment the	ading Spare and results for each additional instrument in		
recommendatio	ns section below and indicate	the instrument used (eg. OVA, 361, OVM, etc.) for each observation.		
Time Station	instr.* Reading	Procedure/Observations/Comments		
1740 20-1/18F	#UW 02	Broothing tone		
	TO	<u> </u>		
9.55 SW-1/16M	the 0.7	AND THE STATE OF T		
10:1/2 521/40	#7 _0			
10:10 50-1/16E	HD - 0.7			
11:00	11/4 0.2			
11:00 An-1/12C	HILL O'C	· · · · · · · · · · · · · · · · · · ·		
12:45 SW-1/15M	HNU O.Z			
12.42 30 1/13/11	HS O			
B:30 5W-1/15R	#1)4 0.2	and the second s		
<u> </u>	12 0			
	- 			
	:			
		`.		
•	Recomme	endations		

Cindu Vates Lindu Urita				
Printed Name		Signature		



				Date 5/18/90 Sheet 1 of 1	
	TSAT	-		Date <u>Offorto</u> Sheet 1 of 1	
Job Name-	1-2-1	00.6		Job Number <u>893-625</u>	
Location	Tropuru	MA		15	
Time In	30_Time Out			udy, rainy Temp. 65 Wind D V	
Instrument	• •		+5	Serial No.	
Calibration	Gas Offm ISon	narhan	instrument Re	pading Spar/Gain/RF Setting	
and Concei	ntration • If more than or	ne instrument nos section by	is used, docume	nt calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, QVM, etc.) for each observation.	
_Time	Station	Instr. *	Reading	Procedure/Observations/Comments	
9:25	JW-1/41	Ht)u	0.2		
		<u>#S</u>	0		
<u>a:35</u>	JW-1/14M	HNU	0.2		
		415	0		
<u>a:55</u>	5W-1/4R	HNU	0.2	See Confidence of the Confiden	
11.10		#5			
11:10	SW-1/13L	HUU	0.0	•	
11:26	5W-1/13m	HNU	02		
11.60	Ju-1/1311	IK	010		
11:25	512-1/13R	HNU	0.2		
	212-11-515	HS.	01		
12:40	5W-1/18L	HNU	0.2		
		<u>H</u> 5	0		
12:40	5W-1/18m	HUu	0.2		
		H 2_	0	:	
12:40	5W-1/18R	HNU	0.2		
11(15/1)	-	<u> #\$</u>	0		
14:00	50-1/19	HNU	0.2	•	
		42	<u> </u>		
					
					
			*		
			· · · · · · · · · · · · · · · · · · ·		
			Recomme	endations	
_					
	-				
()ı	Cindu Vates Cindu Vata				
	Printed Name			Signature	

Golder Associates Inc.

		Date 5/19/90 Sheet / of /
てらのエ		Job Number \$93-6255
Job Name	∞	Joo Number 15 152 Executive
Location Woburn		
Time In 7:00 Time Out	Weather	
Instrument Type	<u>+15</u>	Serial No
Calibration Gas 05pm 150	DUTY GUASTRUMENT Res	ading 10,0 SparvGain/RF Setting 62
and Concentration - # more than or	ne instrument is used, documen	t calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
	•	Procedure/Observations/Comments
Time Station 冬:00 ろいー1/19	Instr.* Reading	Buettube Tone
	K O	
9:50 56-1/20	414 02	u nga kang atau ay
	H5 0	
11:20 50-1/51	Hilu 0.2	
	H5 0	
	-	
		:
	•	·
	-	

	Recomme	endations
	· · · · · · · · · · · · · · · · · · ·	
\ \Uo	tes	Cinda 11-A.
Vame		Curdy Jates Signajura
		Contraction of the contraction o
		•

Golder Associates Inc.	AIR MONITORING DATA SHEET
	Date 5/21/90 Sheet 1 of 1
TSOT	Job Number 893-\$6255
Job Name 13R1	Jou Rember
LOCALINIT	Temp. <u>식</u> 진_Wind D v
Time In 1:00 Time Out Weather Weather	
	Serial No.
Calibration Gas 16 ppm CH4 Instrument Rea	iding 95 Span/Gain/RF Setting 8.84
and Concentration * If more than one instrument is used, document recommendations section below and indicate if	calibration procedures and results for each additional instrument in he instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time Station instr.* Reading	Procedure/Observations/Comments
8:50 SW-1/21 HUU 0.2	Broathing rone
OVAO	
\$11:00 SW-1/22 HNy 0.2	
OVA O	No. 10 April
12:40 50-1/23 HNY 0.2	
OVIT O	
	· ·

Recommendations

Cindu Yutos

Cendy Unter

(49)	Golder	Associates	Inc.
------	--------	------------	------

		Date 5/24/90 Sheet 1 of 1			
Job Name TSRT		Job Number 893-6255			
Location Woburn	MA.				
Time In 7:00 Time Out	Weather 台ムロ	<u>V</u> Temp. 60 Wind D V			
Instrument Type 1104		Serial No.			
Calibration Gas 95 900m 150	batukno Instrument Readi	ing 62 SparvGain/RF Setting 10.0			
and Concentration . If more than o	ne instrument is used, document ca	libration procedures and results for each additional instrument in instrument used (eg. OVA, 361, OVM, etc.) for each observation.			
Time Station 900 SN-1124	Instr. * Reading	Procedure/Observations/Comments			
10:50 5W-1 125	HNU 0.2				
		A. A			
13:00 70-1/26	. Hun 0.5.				
	·				
-	-				
	·				
	• *************************************				
	. 4				
		·			
	. 				
	*				
		• • •			
territoria de la constanta de	•				
	; • •••••••••• ••••••••••••••••••••••••				
Recommendations					
Cindu Vates Contra Unit					
Printed Name Signature					

Golder Associates Inc.

				7 2000
				Date 50990 Sheet of
Job Name _	ISRT_	, ,,, -		Job Number <u>893-6255</u>
Location	Woburn	$-\infty$ 6		
Time In 1	Time Out	\	Weather Clo	
Instrument	Type HOU		·,	Serial No
Calibration (Gas98.9 Kochut	ukno	instrument Re	ading 56 SparvGain/RF Setting 8.48
and Concer	tration . H more than o	one instrument	is used, documen	t calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
		ions section b		
Time	Station	Instr.*	Reading	Procedure/Observations/Comments
9:20	S-1/90	- Athr	-3 ō	Davn hile
0:45	2-1109	412	0.2	Breathing zone
いらめ	5-1/89	111711	- C)-C-	- browning zar
N. 46	21/98		<u> </u>	
11:12	3-1/88	l c	$\frac{0.3}{0.2}$	•
11:45	5.1/97	<u> </u>	0.2	
12:15	5-1/87	11	A 2	
2:35	5-1/96	11	0.2	
B05	5-1/86	۲.	0.2	
13:25	5-1/95			
	. 			
			·	
		\		
				
				
				<u> </u>
		· ———		,
				
		-		·
			Recommo	and otton
			Necomin	PIORIONS
	 	<u></u>		
	·			
	· .		-	
Control 1 day				
	Printed Nam	<u> </u>		Singaliya

Calibration	Type HATE OVA Gas 18-9 par 150	to the in	<u>moter</u> nstrument Read	Serial NoSerial NoSerial NoSerial No
				elibration procedures and results for each additional instrument instrument used (eg. DVA, 361, DVM, etc.) for each observation
Time 9:35	Station <u> ろい-1/54</u>	Instr. * _ <i>OVA</i>	Reading	Procedure/Observations/Comments
	-	<u>H2</u>	0	
11:05	56-1/53	OVA.	<u> </u>	
12:50	3.000	<u>Ho</u> .	<u> </u>	
12.00	5-1/102	- 875 .	0.	
13:20	5-1149	DVA	0	
		H5.	0	
				
	-		·	
	· · · · · · · · · · · · · · · · · · ·		 	·
	•	·		
	· •			
	-			
				
		 .		
*************	•			
			•	
		· ·		
			Recommen	dations



recommendations section below and indicate the instrument instr.* Reading Breith instrument ins	Procedure/Observations/Comments
<u> </u>	
2:30 Sw-1 A HW 0 0 HS 0	
	, , ,
	
	•
	,
· · · · · · · · · · · · · · · · · · ·	<i>y</i> -
Recommendations	

	Golder	Associates inc.
--	--------	-----------------

		Date 0 5 90 Sheet of
Job Name ISRT		Job Number
Location Woburn	MA	
Time In 1.00 Time Out	Weather Sunny	Temp. 10 F Wind D V
1 1 1 1	H25	Serial No.
Instrument Type HNU		56 Span/Gain/RF Setting 8.7
Calibration Gas 18.9 pm Kd and Concentration . w more than a	AUTURIAL Instrument Heading.	span/Galivier Setting
recommendati	ions section below and indicate the inst	ation procedures and results for each additional instrument in rument used (eg. OVA, 361, OVM, etc.) for each observation.
Time Station	instr.* Reading	Procedure/Observations/Comments
8:20 50-1/8	HING O.H.	The state of the s
1020 621/12	<u>#5</u> <u>0</u>	
11:30 SWA/10	HNU 0.2	
	#2	
13:30 5/2-1/2	HUU 012	
	<u> </u>	
		
	·	
	· · · · · · · · · · · · · · · · · · ·	
		<u> </u>
		· · · · · · · · · · · · · · · · · · ·
	·	
		
		<u> </u>
·	Recommendati	ons
· ·		
		
· · · · · · · · · · · · · · · · · · ·		
Cindu Yasas	•	Circly Inter
Printed Name		Signature



		Date 6 7 90 Sheet of
Job Name		Job Number 893-6755
Location Woburn M	19	
Time In @ !30 Time Out W	leather rounc	1, SUN1 Yemp. 80 Wind D V
Instrument Type OVA H	5267	Serial No
		ng 95. Span/Gain/RF Setting 9.92
and Concentration ' * if more than one instrument is	s used, document cali	ibration procedures and results for each additional instrument in serument used (eg. OVA, 361, OVM, etc.) for each observation.
Time Station Instr.* 9:00 5\omega=1/39 OVA	Reading	Procedure/Observations/Comments
H3		
11:40 SW-1127 OVA	2	
H5	0 _	
4:40 SW-1/33 DVA	2	
HU	0	
		A Company of the Comp
**************************************	· .	
		N. N.
		· · · · · · · · · · · · · · · · · · ·
		· · · · · · · · · · · · · · · · · · ·
		
		
		,
		· .
	Recommend	itions
· ·		
Cindu Yate	e5	Cendy Yests
Printed Name		Signature /

Job Name Location Location Time In 1: O Time Out Instrument Type 15. Serial No. Calibration Gas 95 ppm methan one Instrument is used, document calibration procedures and result recommendations section below and indicate the Instrument used (eg. OVA, 361)	TORING DATA SHEE
Job Name Location Location MA Time In LOC Time Out Instrument Type H2 S Calibration Gas 95 pun methalic Instrument Reading 9.5 Span/ and Concentration in more than one instrument is used, document calibration procedures and result recommendations section below and indicate the instrument used (eg. 0)4, 361 Time Station Instr. Reading Procedure Observation 145 0 D: 25 SW-1/22 WA O Breathury D: 25 SW-1/31 WA O H3 O H3 O H3 O H3 O	190 Sheetof
Location Woblem MA Time In 1:00 Time Out Weather Sunny Noth Temp. 70 Instrument Type #2.5 OVA Serial No. Calibration Gas 75 pm memake Instrument Reading 9.5 Span/ and Concentration Instrument is used, document calibration procedures and recommendations section below and indicate the instrument used (eg. OVA) 361 Time Station Instr.* Reading Procedure (Observed 1422) 8:20 SD-1/22 OVA O Breather HS O 13:30 SD-1/35 OVA O HS O 13:30 SD-1/35 OVA O HS O	893-6255
Instrument Type #2.5 OVA Serial No. Calibration Gas #5 ppm MEMICAL Instrument Reading 9.5 Span/ and Concentration ** If more than one Instrument is used, document calibration procedures and result recommendations section below and indicate the instrument used (eg. OVA. 36) Time Station Instr. ** Reading Procedure/Ober #50-1/22 8:20 Sp-1/22 OVA O Breathan 13:30 Sp-1/35 OVA O HS O 13:30 Sp-1/35 OVA O HS O	
Instrument Type #2.5 OVA Serial No. Calibration Gas #5 ppm Methicike Instrument Reading 9.5 Span/ and Concentration ** It more than one Instrument is used, document celibration procedures and recommendations section below and indicate the instrument used (eg. OVA) #8! Time Station Instr.* Reading Procedure/Ober 5:20 3:0-1/22 OVA O Breathiris H5 0 0:25 3:0-1/31 OVA O H5 0 H5 0 13:30 3:0-1/35 OVA O H5 0	
Calibration Gas 5 pm MeMake Instrument Reading 45 Span/and Concentration * If more than one Instrument is used, document celibration procedures and result recommendations section below and indicate the instrument used (eg. 01/4, 34). Time Station Instr. * Reading Procedure/Obse 500-1/22 OVA O Breathan H5 O Breathan H5 O B13:30 Sp-1/35 OVA O B13:30 Sp-1/35 OVA O H5 O	
and Concentration * If more than one instrument is used, document celluration procedures and result recommendations section below and indicate the instrument used (eg. OVA. 36) Time Station Instr. * Reading Procedure/Ober 500-1/22 OVA O Breathuro 1-1/22 OVA O Breathuro 1-1/25 SW-1/31 OVA O 1-1/35 OVA O	Bain/RF Setting 3.84
Time Station Instr. Reading Procedure/Ober 8:20 50-1/22 OVA O Broadhan HS O 13:30 50-1/35 OVA O HS O HS O	for each additional instrument is
5:20 5D-1/22 ONA O Breathun 5:25 5D-1/31 OVA O 13:30 5D-1/35 OVA O HS O	cyations/Comments
D: 25 SW-1/31 WA O 13:30 SW-1/35 WA O HS O	
D: 25 SW-1/31 OVA O 13:30 SW-1/35 OVA O 145 O 15 OVA O 15 OVA O 16 OVA O 17 OVA O 18 OVA O 18 OVA O 19	zone
13:30 5p-1/35 0vA 0	
13:30 5p-1/35 OVA O HS O	
Recommendations	•
Recommendations	
Recommendations	
Recommendations	·
Recommendations	
Recommendations	
Recommendations	•
Recommendations	
Recommendations	· · · · · · · · · · · · · · · · · · ·
a yati	
Printed Name S	ignature



ibration Gas	Time Out		Veather (1000)	TempVind D V
ibration Gas I Concentrati	Bolutylese /	, בי ייו	1.3/1	
Concentrati	Bosuly leve!	11 / ////	7. 201	Temp. 50 Wind D. V
Concentrati	/	H25 1	nstrument Read	ing 60 ppm/4uppm Span/Gain/RF Setting 10-0/M
Tima	On • # more than	one instrument i	is used, document of	libration procedures and results for each additional instrument in Instrument used (eg. OVA, 361, OVM, etc.) for each observation
	Station	instr. *	Reading	Procedure/Observations/Comments
0845	<u>54</u>	_ +V		loss of word suppliest in 9in
0915	5×	الرما	0	no reficeble alon
	 	LEL	D	
	•	0	20.6	the state of the s
_		11.5	0	
10	76	Hi	O.zpom	no alors retical
		_ 	77	,
	·			
· · · · · · · · · · · · · · · · · · ·				
				
	·			
	<u> </u>			
	. <u>.</u>			· · · · · · · · · · · · · · · · · · ·
	<u></u>			
	. 			
		-		
			· · · · · · · · · · · · · · · · · · ·	
		 . 		
	-			1
			Recommend	fations
				
	· - · · · · · · · · · · · · · · · · · ·			
				

(5)	Golder	Associates	Inc.

				inla
•				Date 6 8 90 Sheet 1 of 1
Job Name	ISRT			Job Number <u>R93-625-5</u>
Location	Dobuso_	MA		
Time In 2.3	O_Time Out		Veather	TempWind D V
instrument Ty	ype OVA		5267	Serial No
Calibration G	as 950m met	thane 1	nstrument Rea	ding 95 Span/Gain/RF Setting
and Concentr	ration . If more than o	ne instrument	is used, document	calibration procedures and results for each additional instrument in a first ument used (eg. OVA, 361, OVM, etc.) for each observation.
				7
Time	Station <u> </u>	Instr. *	Reading	Brothing Tole
<u> </u>	50 1/20	#2	_	OFFICE OF THE STATE OF THE STAT
10:25	SW-1/28	OVA		
10:20 4		#5	8	No. Office of the Control of the Con
12:40	56-1/32	OVA	O	
-		H5	0	
13:50	517-1/38	OVA	0-800m	usually
			3000m	short peaks
		HUL	<u> </u>	Usually
			Up to 2.5	short peaks
	·	115	'	* · · · · · · · · · · · · · · · · · · ·
	<u></u>			
			 	
				
	v ¹ 1 ² 1	,		
		-	 	
		-		
·			<u> </u>	
				
•			·	
	<u> </u>		 	
-	·			
	,		Recommen	Metione
			Maconinnai	reactions .
<u></u>				
***************************************		,		
<u> </u>	du lat			0 4 414
<u> Cin</u>		<u>5</u>	_	- unay Coto
-	Printed Name			Signature

(GD) Go	older Associates Inc.
Job Name	ISRT

				Date 6 9 90 Sheet of	
Job Name	ISRT				
Location	Wolsern	MA	<u> </u>		
	Time Out	V	Veather Chudy	TempWind D V	
Instrument 7	m. 60		<u> </u>	Serial No.	
Calibration (325 95 pm M	othing	nstrument Reading_		
and Concentration • If more than one instrument is used, document calibration procedures and tesuits for each additional instrument in					
	recommendati	ons section be	low and indicate the instru	ment used (eg. OVA, 361, OVM, etc.) for each observation.	
Time	Station	instr.*	Reading	Procedure/Observations/Comments	
8:00	SW-1/93	O/A		Breathung tone	
8:20	6.2-1 Tad	45	- 		
0.60	JW-1/97	OVET !		A	
8:35	810-1195	07A	-2		
000	500 17 19	45	~ ~		
9:00	512-197	OVA			
		HS	<u>. O</u>	•	
9:30	5W-1/99	OVA	0		
		<u>H5</u>	<u> </u>		
0:55	5-1/141	<u>OVA</u>	1 ppm _		
		<u>H5</u>	<u> </u>		
11:10	5-1/142	OVA			
	· · · · · · · · · · · · · · · · · · ·	45	<u> </u>		
				· · ·	
					
					
					
					
					
					
				· · · · · · · · · · · · · · · · · · ·	
	`		Recommendation	ons .	
			,		
			, ,		
	·				
(V m	14 1/0+			Cindy Leter	
an window	Printed Name	<u> </u>		Signature	



		Date 6/11/90 Sheet of
Job Name		Job Number 893-6255
Location Woburn	ma	
Time In 6:30 Time Out_	, Weather	
Instrument Type OVA	H5\	Serial No
Calibration Gas 95100 Mul	Hare Instrument Read	ding 95. Span/Gain/RF Setting 7.67
and Concentration for more than or	ne instrument is used, document c	alibration procedures and results for each additional instrument in
		instrument used (eg. OVA, 381, OVM, etc.) for each observation.
Time Station 99	Instr.* Reading	Procedure/Observations/Comments
	H5 0	\mathcal{O}
9:05 522-1/80	OVA.	
	HS 0	
9:55 500-1134	OVA	
	150	
10:30 5W-1/36	OVH	
11:10 50-1137	MS	
11:10 30-1/97	HS O	· · · · · · · · · · · · · · · · · · ·
12:10 3w-1/41	0/8	
the same of the sa	HS 0	
13:00 560-1/48	OVA	
	HS 0	
	,	
	-	
		,
		
	Recommen	dations
·		
7	1-0	11.01 11.4
	tes	- ang yolo
Printed Name		Signature

(S/J) G	older Associate	s Inc.	•	AIR MONITORING DATA SHEET
				Date 6 12 90 Sheet 1 of 1 Job Number 893-6255
lab blama	ISRT			10h Number 893-6255
Job Name _ Location _ $\not L$		m	A	OU HUINOU ALLES
Time In	Time Out		Veather	Temp. 70 F Wind D V
Instrument 1		H5	HUU	Serial No
Calibration (300 95mm Mu	thata	nstrument Re	ading 95 Span/Gain/RF Setting
and Concen	tration It more than o	one instrument :	is used, documen	t calibration procedures and results for each additional instrument in
	recommenda	lions section be	ilojy and Indicate (the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time 9:36	Station Sw-140	Instr.*	Reading	Procedure/Observations/Comments Breathung Toru
4:	<u> </u>	H5	$\overline{\bigcirc}$	- VIROLIUM LOI G
10:05	JW-1/44	HNU	0	
	-	H5	0	
11:30	SW-1/43	HUC	<u> </u>	
12:20	213 1/1/	45	$\frac{\circ}{\circ}$	·
9:30	JW-1/46	HULL		
13:35	50-1145	H1)/	0	
<u> </u>		FIS	0	
				9
				
				
				
				
		-		
				• • • • • • • • • • • • • • • • • • • •
		- 		
·				
				•
				·
			- Dassemer	
			Recomme	61Mari0112
				
				
· Cin	du Vi	te5		Cender Cholin
600 10 10 10 10 10 10 10 10 10 10 10 10 1	Printed Nam			Signature

((<i>5/L</i>)) G	older Associates	inc.		AIR MONITORING DATA SHEET
(0)				Date 6/13/90 Sheet of
	TSOT	-		
Job Name_	1.20101	α		Job Number 893-6255
Location -	200001)	1 9 1	7	
Time In	Continue Out	V	Veather	Temp Wind D V
Instrument '	Type HOU	170	-,	Serial No.
Calibration (Gas 98.9 ppm 15			
and Concer	nce nert erome * Poitant recommendation	ne instrument ons section be	is used, document Now and indicate (calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
S:15	Station ろい-1/40	Instr. •	Reading	Procedure/Observations/Comments
	-	H5	<u> </u>	The state of the s
9:00	JW-1/47	HWu	0.2	
		H5		Mark Services
10:30	5-1/3	HUK	0.2	
	/	H5_	<u> </u>	
11:10	5-1/4	HNU	0.2	
· · · · · · · · ·		H5	<u>. O</u>	
11:55	5-1/5	H	0.0	
17:57		110	$\frac{0}{0.2}$	
2:50	2-1/8	1100	$\frac{O,O}{\wedge}$	
4:00	3-1121	+11 6	0.2	·
	0 1/01	#5	<u> </u>	
14:40	3-1122	#1/0	0.2	
<u></u>		H5		**************************************
				
				
				
				

Recommendations

M				
((<i>5</i> / 2) G	older Associate	s Inc.		AIR MONITORING DATA SHEET
Ÿ				Date 11/5/90 Sheet 1 of 1
੍ਹੀ Job Name⊸	ISRIIN	lustri Ple	ex Re-Design	9n Invest, Job Number 903-6400 893-
	woburn m		Boston-	
Time in 7.'C	Time Out 19	5:10 V	Weather <u></u>	Temp. 48 Wind D V
Instrument 1	Type HNU			Serial No
Calibration (3as 150 butyle	ne 98.7	P $ ho$ m Instrument Re	ading 78 Span/Gain/RF Setting 10.5
and Concer	tration • _{If more than c} recommendat	one instrument ions section be	is used, documen Now and indicate t	nt calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time	Station	Instr. *	Reading	Procedure/Observations/Comments
11:45	5-1/164	#N/A	_2_	Bresthing some + 2" dan
`	8 1/1/6	H25		inside borehole.
<u>12:25</u>	5-1/160	H-5		
12:45	5-1/158	HNu	7	
		比5	0	
4:30	5-1/162	#N/u	_2	
15:00	8-1/1101	H ₂ S		
<u>(),00</u>	0-1/101	#3	6	
		. <u>.1.7.**</u> .		
				
				
		· ·		
				
				· <u></u>
			Recomme	endations
				
\				
	· · · · · · · · · · · · · · · · · · ·			
	indy lati	25		Cendy yalo
State of the state	Printed Name			Signature



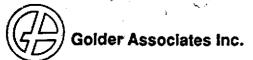
Calibration and Conce	Gas S. T. ppm 1500 ntration If more than o	ne instrument	t is used, document (ding <u>OD</u> Span/Gain/RF Setting <u>ID. O</u> calibration procedures and results for each additional instrument of instrument used (eg. OVA, 361, OVM, etc.) for each observation
17:15	5-1/163 5-1/159 5-1/160 5-1/152 5-1/153 5-1/154 5-1/156 3-1/155 5-1/166	H25	Z ppm Z ppm I ppm I ppm	Procedure/Observations/Comments Breathing zone + 2" d inside botenole. NOTE: S-1157 had HNU of = 5 ppm when probe was s down the hole after drilling t HNU = 4 ppm after drilling to
15:05		H,5 HNu H,5	Recommen	dations



	_	_		Date 11 / 7 90 Sheet 1 of						
Job Name	Industri Me	ex Pre-I	bagn In	Vest Cetion Job Number 813-6255.035						
		MA								
Time In 7	OO_Time Out	V	Weather <u>Sur</u>	MY, Clary Temp. 48_Wind D V						
Instrument 1	Type HNu			Serial No. 9014						
Calibration (Calibration Gas 18.7 150hutylene_Instrument Reading_76Span/Gain/RF Setting_10.0									
and Concentration • If more than one instrument is used, document calibration procedures and results for each additional instrument in recommendations section below and indicate the instrument used (eg. OVA, 361, OVM, etc.) for each observation.										
Time	Station S-1/151	Instr. * HNU	Reading	Procedure/Observations/Comments						
		4,5		Monitoring breething zone						
8:45	S-1/172	H-S HVU	0.2	and top of borehole.						
10:00	5-1/124	HNu 1+ 5	0.2							
11:00	5-1/147	1+Nu 1+,5		0.5 in breathing rune. 15 pm at top of hole after						
11:30	5-1/148	H25	0.5	in top of hole after drilling						
12:30	3-1/131	HNU .	0.2	to 36".						
13:22	5-1/133	HWU HZS	0.2							
17,50	5-1/169	HNU.	<u>05</u> 0							
<u>µ:35</u>	5-1/169	4124 425	0.5							
			Recomme	ndations						
$\overline{}$	ade Vat			Cooder 11-A						
DS WILLIAMS	ndy late Printed Name	<u>'</u>								



_, _	$\overline{}$		_	_		Data	1/8/90 st	neet_L of_L	
(Job Name	Industri	Pex 1	re-Des	sian	_Job Nun	1 893-	6255	
		Woburn	MF	7					
		OO_Time Out		Weather <u>SW</u>	nny	Temp. 5	Wind D.	v	
	Instrument	Type HNu				_Serial N	0		
	Calibration	Gas 98.7 pm 150h	dyle De	Instrument Re	ading_54	Sp	an/Gain/RF Se	tting <u>(0,0</u>	
	and Concentration - If more than one instrument is used, document calibration procedures and results for each additional instrument in recommendations section below and indicate the instrument used (eg. OVA, 361, OVM, etc.) for each observation.								
	Time	Station	instr. *	Reading			bservations/C		
	7:50	5-1/168	Him	0.5		<u></u>		upg zone	
•	8:40	6-1/120	H25			pot	boreho	ie.	
	<u> </u>	5-1/110	H25			 			
	11:35	5-1/171	HVu						
			H25	0					
	9:40	5-1/135	HNA	0,5	-		· · · · · · · · · · · · · · · · · · ·		
-	10:25	5-1/134		2					
	<u> </u>	5 y .5 /	H,5	6					
	12:00	5-1/136	HNu	0.5					
	12:116		H-5						
	12:45	5-1/137	HNU	0.5	· 		".		
	15:18	5-1/124	H1).	1.0		· · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , , 		
			#35	0					
	15:50	5-1/149	High	0.2		·			
		·	Hus						
				,					
									
									
									
	,			Recomme	ndations				
				 					
C^{\sim}									
、 ノ		10du Va-	 Lac			1:00	1. 110	+. ^	
' i	27 10 10 1 mg	Printed Name	(- 3				Signature/		



strument	Туре			TempWind D V Serial No8
	Gas <u>Tookut</u> ntration • If more than	one instrument	is used, document d	ding 62 00m SparvGain/RF Setting 100 Calibration procedures and results for each additional instrument
Time	recommenda Station	ations section be Instr. *	elow and indicate the Reading	e instrument used (eg. OVA, 361, OVM, etc.) for each observatio Procedure/Observations/Comments
0846	QW-38	HNY	1-2	in anim
	N.	4,5		in caoing
756	<i>(</i> \	AN	0.6	in Caping
		Ass	<u> </u>	.(
1132	<u>nw-31</u>	_ <u>1+N~</u>	0.6	Background
		<u> 7425</u>		
1137		<u> </u>	90 pte 50	Insule carring
/138	E.	- Has	60 9 /	musking grace
100		- - 10 5	0	
:247	OW-32	# N ~	0:6	Beating space
·· ·	1	125	0	(1)
1248	Ç1	L Nu	ا، ج	To Caoing
	<u></u>	#25	0	,,)
1355	OW-31	μ Νις	D. 4	Building Back ground
		425	Ϋ́O	n 113
1357	DW-36	400	6.4	In castry
	11	1+25	0	
1420	0w-37	<u> 40-</u>	<u> </u>	Packground
lum .	·	<u>h25</u>		II,
1425	DW-37	HN	0.4	In casing
152 ^	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	- 1 5	6	1,047
1530	OW16	- [+ Ny	0	1 has No lock, her coing
	11	1/3	0,4	0 15
		- ANa -	Recommen	
		4 '	necommen	Manoria
		<u> </u>		
	 			



Fime In	Time Out		Weather	TempWind D V_
Instrument 1	уре			Serial No
Calibration C	as I so But		instrument Rea	ding Span/Gain/RF Setting
and Concent	tration - If more than	one instrument	is used, document	calibration procedures and results for each additional instrui
Time	recommenda Station	nions section be Instr. *	elow and indicate the Reading	e instrument used (eg. OVA, 361, OVM, etc.) for each obser Procedure/Observations/Comments
0932	0w-21	HKU_	OOO	In Casing and Surro
		H ₂ S	_000	Area before Any well Te
09.46	15-30	HNU	00 0	While Montoring
		H2S	_009	(Slug Testing)
(420	0114	H N4	0.4	background
	Ч	4,5	0	V-u
1012	۸	ltnu	0.7	in casing
	· ·	1/25	0	
[USA	04-40	HNU	0.4	Background
~~················		14-5	6	<u> </u>
1072	<u>06-40</u>	MA	0.4	Incaring
		1/25	6	
1347	0W - V(0)	I Nu	0.8	belysom
	0w ~11	<u> 45</u>		
	nw-11	ANU	<u>0.8</u>	in caring
	P-W0	14,5	0	u J
Ø 1418	6w39	ANI	0.7	Bickman
		1/, 5	0	.1
	4	HNu	0.6	Jr Cons
		H25		
1500	0013	HaS	0	In Casina
1820	0013	HNU	<u> </u>	
1520	5100	Has		In Casing
	`	HNU		
			Recomme	ndations
<u></u>		· · · · · · · · · · · · · · · · · · ·		
				
··· -				



Location _	-Mopora	Mass		
Time In	Time Out	<u> </u>	Weather	TempWind D V
Instrument '	Туре			Serial No
Calibration (Gas I sobut	lene	Instrument Read	ling Span/Gain/RF Setting
and Concer	stration + _{If more than}	one instrument	is used, document a	alibration procedures and results for each additional instrumer
	recommend	•		instrument used (eg. OVA, 361, OVM, etc.) for each observal
Time (027	Station Ow-40	instr. * ዛለч	Reading /). 2	Procedure/Observations/Comments
1027	0w-40	1/25		Beathing -100
1027			7. 2	7 ()
1029	•	H ₂ 5		In Casing
	8			
1205	0w-11	HNV	0.0	1 n Casing
	.1	H ₂ S	0	()
1251	OW-13	HNY	0.4	In (Bain
L,	1,	1t3 3	0	100
1324	04-41	1-1-Nx	0.5	In any
	ч	425	δ	
1402	NW-39	HNY	0.4	Background
\(\)	ч.	H ₂ 5	0	V.,
11	e.	it Nu	0.1	In Caping
ų	در	4,5	δ	
1450	OW 30A	Has/HNO	<u> </u>	IN CASING
	<u>0 w 30 B</u>	H-S/HNU	0	In Casing
1515	<u>00304</u>	Hasinno		
	<u>0 w 305</u>	H_S/HNU	<u> </u>	
1590	OW-18	HNU	0.3	in casing
1549	OW-18	#25.	<u> </u>	<u> </u>
<u> </u>	BW-18A	Har	0.3	buellground
K49-	0W-18A	425		
	0m -184		7 Recommend	dations in contra
[549	OW-134	125	0	
			· - · · · · · · · · · · · · · · · · · ·	,



•	LSTime Out Type <u>イハ</u> リ	\		<u>45°F</u> TempWind DV_10-
Calibration (Gas Tsobuty I	one instrument	Instrument Rea is used, document	ding Span/Gain/RF Setting calibration procedures and results for each additional instrument in e instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time ⊖¬4≥	Station	instr. *	Reading	Procedure/Observations/Comments
	TW-35	HUN/H36	0	In Casing and surrounding
0751	Tw-25	H27	0.5 /0	
0713	Tw-20	H25 H24/	0.4/0	In cost
0945	TW-45	HN H-5	5/0	In Casing
1110	7W-40 0W-19 0W-19A	HN0/H25	· \$ 10 · \$ / 0	In Casing
	- ΓΙ-WO	HNU/H25		In Cas ing
	0ω-23	HHU/ HaS	0	In Casing
1550	on-15	HN9 H ₂ S	0	In cosing
1625	0w-4z	HAV	0	± n Casing
			Recommen	ndations



				Date 12-3-90 Sheet 1 of 1
	ISETIGHTRU	<u>u#</u>		
Location M	obus Mass			<u> </u>
Time In 14	Time Out 13	45v	بالک Veather	Temp. 32° Wind D. NE v 10-15
Instrument T	Type Hnu			Serial No. No. No.
Calibration (as <u>Teabutylose</u>	98.90m	nstrument Re	eading 100 Span/Gain/RF Setting 2/12
and Concern	tration • # more than or	ne instrument .	is used, documer	nt calibration procedures and results for each additional instrument in
Time	Station	instr. *	Reading	the instrument used (eg. OVA, 361, OVM, etc.) for each observation. Procedure/Observations/Comments
15.45	OW/3	NA	0	HNU , right at the top of wer
16 10	_0:N 13	NA	0	Pending in Pune Drum
1745_	CALIBRATE	NA	100	98.9 my Jacktyline
				•
				
				-
				
				
				
				
		 .		
			<u> </u>	
				
				
<u>.</u>				
				· · · · · · · · · · · · · · · · · · ·
				
			Recommo	endations
		<u></u>		
REN MA	ALTER	•		Race WA cuscum

Golder Asso	ciates Inc.
1-	- 1 -

1					Date 12 /4/90 Sheet 1 of 1			
(.Inh Name	ISRT GWTR	IMA		Job Number 903-6400 -510			
,		Nobuen, Mass						
	Time In 0	745 Time Out 134	42	Weather Rain	14 9 16 dy Temp. 45° Wind D. 15 V 5-10			
	Instrument	Type HH Hnu			Serial No. None			
•,	Calibration Gas Isobutylene 98.9 Instrument Reading 100 pron Span/Gain/RF Setting 2/48							
-	and Conce	ntration • # more than or	ne instrument	is used, document	calibration procedures and results for each additional instrument in			
ı	•	recommendatio	ons section b	elow and Indicate B	ne instrument used (eg. OVA, 361, OVM, etc.) for each observation.			
	Time O 940	Station	Instr.*	Reading O	Procedure/Observations/Comments			
	N12	0044	Al/A		1 LL LI			
*	CALSON	412 1410 m	NA	100000	SPAN GAEN 2/48			
· *	1439	OWI71439 (OWI?	BNA	0	at well head the steer off whe . Every a			
	1603	0W16	MA	10.en	at well hear & Recorthing Zone			
K	743	CALIBRATE	MA	120ppm				
			<u> </u>					
				·				
		·						
C								
								
	· · · · · · · · · · · · · · · · · · ·							
	•	-	·					
								
					•			
		·						
	<u> </u>		· .					
	_			Recomme	ndations			
				· · · · · · · · · · · · · · · · · · ·				
								
								
\	. 	Med M.1	1 å	table 11	H.N-14			
		Printed Name	nmay 1	lazizuddia	Signature			
		Printed Name			SKITATUR			



	•			Date 12/5/90 Sheet 1 of 1
Job Name	ISRI GWTR	Mr	<u> </u>	Job Number 903 6400.513
Location J	Usburn Mass			
	Time Out	\	Weather Els	Temp. 38 Wind D. NE V_10-15mh
Instrument '	Type Hall			Serial No. UDNE
Calibration (Gas Isabetylene	78.90m	Instrument Rea	ading 100 ppm Span/Gain/RF Setting 4/46
and Concer	ntration • If more than o	ne instrument	is used, document	calibration procedures and results for each additional instrument in
Time	Station	instr. •	Reading	he instrument used (eg. OVA, 361, OVM, etc.) for each observation. Procedure/Observations/Comments
		mieti.		Procedure/observations/comments
0950	0w-31	WA	300m	buseline (bukgrand)
0951	18-MO	N/A	2 pom	611 downward of well head
0952	ow-31		Boom	I'l mide well bend (PUC Coing)
1110	0w-31		2-00m	buckgrand
7770	<u>0w-31</u>		_5aem_	1" down PVC
1350	CALIBRATE		100 prm	SPAY1/6AXA/ 4/32

	· · · · · · · · · · · · · · · · · · ·			
			·	•
			· 	
				·
•				
			Recomme	ndations
			 	
· 				
		<u> </u>		
			· · · · · · · · · · · · · · · · · · ·	O 44
BENL M	Printed Name			Ren Manyung Signature
				g vigitalization



				Date 13/10/90 Sheet of
Job Name	ISRT/GWTR/V	MA		Job Number 903-6400-610
	DRURU, MASS.			
Time In 8.9	<u>○ Time Out 1</u>	07_	Weather <u>Co</u> c	DOY Temp. 45° Wind D. UE V 5-15 MA
Instrument	Type HNUI	, , , , , , , , , , , , , , , , , , ,		Serial No. MOYO
Calibration (Gas ISOBUTYLEN	9894	instrument Rea	iding 100 pan Span/Gain/RF Setting 4/32
and Concen	tration • If more than one recommendation	e instrument ns section b	t is used, document selow and indicate th	calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time	Station	Instr. *	Reading	Procedure/Observations/Comments
0910		NIK		at (inside) well !! Checken verpour on met
<u>10ໜີ</u> ເວີເດ		-NA-	98.9 why	Standard 4/37 (100 pgm revolvy)
1350	CALIBRATE OW 17	NA	32.7 mad	Storday 4/37 (100 ppm readily)
1539	0W-16	NIA		11 61 61 - 4
1544	0116	MY	8pm	Assing hand briling D som in Borothery Ford
1707	CALIBRATE	NA	1000000	
				
	· · · · · · · · · · · · · · · · · · ·			
	•		· · · · · · · · · · · · · · · · · · ·	
				
				
			Recomme	ndations
			,	
-				·
BEN M	AUGINA	<u></u>		Bon Mangun Signature
STATE OF THE PARTY	Printed Name			Signature



				Date 12/19/90 Sheet 1 of]
- Job N ame -	ISRT/GW	TR/MA	· 	Job Number 903-6400-510
Location _	woover, n	<u>NASS</u>		
	Time Out	11:55_1	Weather <u>Cuc</u>	DUDY Temp. 45° Wind D. South V 10 mpH
Instrument 3	Type HUu_	· · · · · · · · · · · · · · · · · · ·		Serial No. Mone
Calibration (Sas Isocurvu	W 98.9pm	Instrument Re	Serial No. Mone ading 100 port Span/Gain/RF Setting 11/32
and Concen	יו שאלוו זו	MILLOLDE HISTORISMI	IS USOU, DUGUITION	t calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time 9:15	Catilation	MA How	Reading 55%	Procedure/Observations/Comments W/ 98.9% foolstylene (kr. bonzene)
11,55	Trailer	NINETAL	56%	W/ 398.990 Inbuffens (kelvengens)
1012	0W31	NIA_ NIA_	ZOROM	et well head of in Breathing Zone
				The state of the s
				· · · · · · · · · · · · · · · · · · ·
		 .		
				
				
				
				
			Recomme	endations
				
	<u>-</u>			
₹	1 MANGZ	- · · · ·		Ben Manyun
DEN	Printed Na			Signature



Time In 0	330 Time Out 14	.40 V	Veather <u>C اقمح</u> Temp. <u>ناه ۹</u> Wind D. <u>UE</u> ۷	0 -
	Type Har	· · · · · · · · · · · · · · · · · · ·	Serial No. None	<u> </u>
O-Charte	Type	au a	Instrument Reading 100 ppm SparvGair/RF Setting 1/2	
and Concer	tration * * *	10.2 60m/	instrument Reading 100 ppm SparvGairVRF Setting 172 is used, document calibration procedures and results for each additional instrum	<u> 22 -</u>
	recommendation	ne instrument ons section be	is used, occurrent carioration procedures and results for each additional instrun- plow and indicate the instrument used (eg. OVA, 361, OVM, etc.) for each obser-	atio
Time	Station	instr. *	Reading Procedure/Observations/Comments	
0730	CAUTBRATE	N/A	100pm * Liz Kreml Culibrated to	00
<u>0გა3</u>	DWIH	1	Open inside Pic casing	
0934	0W-18		Oppm u u u	
1117	DW-17		Oppm u li	
1240	014-16		Brown moide PUE Carring 6" of outside cus	<u></u>
			On breathing zone	
1320	CALIBRATE		55ppm 28.9ppm standard Spin/Gam Z/86	
1413	-om-31		Sppn at well head (Puc) of Reathing:	3 V
<u> 1630 </u>	CALLGRATE	<u> </u>	55 ppm 989 pm stundard (AVC)	
	<u></u>			
				
				
<u> </u>				
			Recommendations	
<u>- 1</u>				
10 2 16 2 W	19 S			-



	,			Date 12/5/90 Sheet 1 of 1
Job Name	ISPT CWTR	MA		Job Number 903 6400-510
Location 🕹	Warry Ma	<u> </u>	D 1	Au
	<u>に</u> Time Out _	\	Weather Pla	Temp. 38 Wind D. U. V 10-15mpl
Instrument	Type Hall			Serial No. NONE
Calibration (Gas Isabutylene	Mrs 6.86	Instrument Re	ading 100 ppm Span/Gain/RF Setting 4/46
and Concer	ntration • # more than	one instrument	is used, documen	t calibration procedures and results for each additional instrument in
	recommend	ations section be	How and Indicate 1	ne instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time	Station	instr. *	Reading	Procedure/Observations/Comments
0950	0w-31	N/A	300m	buseline (butgrand)
0951	1E-WO	_ NA	2-2011	6" domawal of well head
0952	ow-31		8000	I'll maide wall head (PUC Casing)
1110	0W-31		2-00m	buckgrand
1110	0w-31		<u>Soem</u>	1" dem PVC
1350	CALIBRATE		100 prin	Spary 6 Arm 4/32
			<u>-</u>	
				
				
		 ·		
				
				
		 ,		
			· "	
				· · _ · _ · _ · _ · _ · _ · · · · ·
·				
	***************************************	 .		
		- .		
		 ·		
		·		
·. ·		 •	Recomme	ndations
2-1 M	ANGINA			Ren Manyein
- 17 EV 1. 7	Printed Nam			Signature



•				Date 12 4/10 Sheet / of /
	ISRT ENTR	MA		Job Number 903-6400 -510
Location _	Nobuln, Mass			
	145 Time Out 134	2 we	eather <u>Rair</u>	14 8 Chardy Temp. 450 Wind D. NE V 5-10
instrument	Type HH Hnu			Serial No. None
Calibration	Gas Isubutylene	98.4 100	t strument Rea	ading 100 pow Span/Gain/RF Setting 2/48
and Concer	ntration • If more than one	instrument is	used, document	calibration procedures and results for each additional instrument in the Instrument used (eg. OVA, 361, OVM, etc.) for each observation.
Time	Station	Instr. *	Reading	Procedure/Observations/Comments
0948	-om-14 .	NA _	<u> </u>	at well head
<u> 15</u>	ATE HUOL	N/ft _	100	11 LL LL
W	ATE 1410 hu OWIF1439 (OWIF)	VIV -	100 ban	SPAN GATO 2/48
1603	ONLY	NA I	0	at well head the pressure cup on we
X 1243	CALIBRATE	MA	120pm	at well have & Kreathing Tone
- 11 11 1		1V(-)		
				
				_
	-			
				
				<u> </u>
	·			
			·	
				····
		<u> </u>		-
				
			Recomme	nations
				
,				
\/	Moh smi	1 4.		V NI IL
	WELL IIAI.	i Tita.		

				Date 12/10/90 Sheetof
Joh Nome	ISRT/GWTR/V	NΑ		Job Number 903-6400-510
	Doburu, MAGS.			300 Number
	70_Time Out _17	17 V	Neather CLOX	Temp. 45° Wind D. UE V 5-15
	ype HNu.			Serial No
Calibration (as Izobutyen	98.9	Instrument Rea	Iding 100 ppm Span/Gain/RF Setting 4/32
and Concern	tration • If more than on	e instrument	is used, document	calibration procedures and results for each additional instrument in the instrument used (eg. OVA, 361, OVM, etc.) for each observation
Time	Station	instr. *	Reading	Procedure/Observations/Comments
0910	_ PHOL	NIA		الا المن أدان كالحد
1050	_0 <i>w</i> −18	NA_		at [inside] (abil) with there to the
130	CALIBRATE	JA	98.9 ww	Standard 4/37 (100 ppm readily)
1350	F1.W0	NA		1" moide of PUC Come
1539	DW-16	NIA	<u> </u>	a con a l
1548		<u> </u>	8ppm	- Arring hand brilling & som in Brilling 7
1707	CALINME	NA	10000	98.9 som of m Jury
			<u> </u>	
			Recomme	endations
	• .			
				
			-	



				Date 12-3-90 Sheet \ of 1
Job Name	ISET/GWTR/	ua		Job Number 903-6400-570
Location W	Johnn Mass		·	
Time In 14	00Time Out _13	45_1	م <u>ا</u> Weather	1 Temp. 32° Wind D. NE v 10-15
	Туре Ниц			Serial No. Mout
		98.90m	Instrument Re	ading 100 Span/Gain/RF Setting 2/12
and Concen	tration • If more than or	ne instrument	is used, documen	t calibration procedures and results for each additional instrument in
Time	re∞mmendation	ons section bi Instr. *	BIOW and Indicate 1	the instrument used (eg. OVA, 361, OVM, etc.) for each observation. Procedure/Observations/Comments
1 11116	Station	msu.	Reading	Procedure/Observations/Comments
15.45	0W/3	NA	0	HNu., right at the top of well Panding in Pring Down
16 10	_0 w 13	NA		Rendon in Punz Down
1745	CALIBRATE	NA	(00	98.9 pm Tsobituline
		.,	<u></u>	
				
				
		 .	** ·	
		<u></u>		
	·			
			<u>. </u>	

			Recomme	endations
			Hooming	·······································
				
Denle		,		E us A "
REN M	Printed Name			Sen W\congerne Signature

,	•	つ00 つ00 で0	0NH 82 H ØNH	h5 (15 115	Lhal 9hJl 9801
•	*	000 3.2 000 000	54 914 524	hs hs hs	6701 6701 510
		7·0	0144 534	h5 b€	वावा वश्क
s		000	57H	be be	og b.
HON/Sueltov	PS90	Deading 1	Transfort -	rothet?	Jime Jime

That rument Reading: 55 ppm

The In 5080 The O.H:

Job: 15RT/Woburn/MA

HNO PID 10,5eV

Span Setting. 8.54 pm.

Callbation Gas: 98 ppm 150 buttlen

Job. No : 893-62558 /

15/918: Apr/91



_		Date 3-27-97 Sheet of
Job Name FSRT		Job Number <u>\$ 903-6400</u>
Location Woburn, MA		
Time In 0800 Time Out	Weather <u>১৮৯১</u> ৮	Temp. ~ Yo-55 Wind D. from V light
Instrument Type HNU 10,5e	V PID	Serial No2
Calibration Gas 98 ppm 150 butylen	eInstrument Reading	Span/Gain/RF Setting 2.20
and Concentration - If more than one ins	trument is used, document calibration	n procedures and results for each additional instrument in
		ent used (eg. OVA, 361, OVM, etc.) for each observation. Procedure/Observations/Comments
	str.* Reading	Procedure/Observations/Comments
0855	1 0.4pm /0%	
095	0,200m/1070	
(800	0.10pm/1%	
1105 4	0.1 ppm/170	
1440 RBX-2	0,20m/2%	
1515	1 Oil ppin/290	
		
· · · · · · · · · · · · · · · · · · ·		
	Recommendation	ac .
	песопписловной	
		
al C		Robert M. Harki
Robert M. Glazier Printed Name		Signature



$\overline{}$				Da	te 3-28-	9/_ Sheet.	(of)
Job Name	Usburn	Recharge	Borings	Jol	Number .	9 <u>/</u> Sheet. 903-640	0,410
_ocation	Waburn	MA					
Time In 0	700 Time Out_	V	Veather_500	Tel 4 36 / Sel 55 / f/m	mp. 70°F	Wind D. <u>5</u>	V ~Zomph
instrument T	vpe HNS	10.2eV	PID MS	<i>4361</i> Ser	rial No		
Calibration G	as 1570 (N4)	ere oppn His	nstrument Read	ding 50%/ppm	Span/Ga	in/RF Setting	2.2
and Concent	ration • If more tha	n one instrument	is used, document d	calibration procedures e instrument used (eg	and results fo	or each additiona	l instrument in
Time	Station CBX-Z	Instr. *	Reading	/ Procedu	re/Observ	ations/Com	
0850	126X - C	_ WULL	0,5 pm/190	breathring	TONE		
<u>0030</u>		<u> </u>	1,40M/100		······································		
D45	PBX-3	_ 	5/00m/0%				
			77			_	
						<u> </u>	
							
					 		
							
					<u> </u>		
						<u> </u>	
	· · · · · · · · · · · · · · · · · · ·	 ·					
		 ·					. · - · - · · · · · · · · · · · · · · ·
		 •					
						-	
		 .		 			
		.	<u> </u>				
 .							
 .				<u></u>			
 .		 ,					
							
			Recommen	dations	-		
							
	· <u></u>						

01.	m /1			Orl	Ams	Maria	
(Apple)	M- Clazi	6.			Sign	nature	

E CHIME LOS ETOP OF CESTE VEE 1, 100 PILL

INDUSTRIPLEX BATHYMETRIC PROJECT LOGBOOK

	P	1	0	5	3	8		0
--	---	---	---	---	---	---	--	---

OMMANDEAU AEROCIATES, INC	INDUSTRITE	LK BRINING!	NIC INCOLCI		TIME			
NAME	DATE	COMPANY	PURPOSE	LOGIN	1 1	OUT	1	1
1 Charged	3/2/4/		1 1					<u>-</u>
2 Culibrated	2/27/91			7:45	<u>a </u>		<u> </u>	
2 oun Rea	dia 3/17/	vi Var	lous tim	03 03 //	20.01	on		
· calibratio.	2 4184 3/38	51 A000	1					
5 Oum peu	dina 3/35/	191 100	wous I te.	in 15 12	امم مان	L	1	
6 Dond wat	er necessa	6 7/38/91						
7 well at to	op of EA	ST/WEST A	A HILL P	ile 50	.000ml		-	
8 Calibration 1	lest 3/1/91	Cood			1' 1			
9 CAM RE	401.65 ¥	11/91/10	hious ti	res 4	v.600			•
10 calibrated	1 3/7/91							
11 OUM REAL	origis dip ud	rious ltimes	1201000	\sim	ļ	}		
2							1	
13								
4					Ì			
15			1	1		<u> </u>		
16								<u> </u>
17								
9			: .					
20						·		
21								
12		<u> </u>						
23	·					1		
4						·		
25			<u> </u>		-			
26		<u> </u>	-					
7		}	1.			<u> </u>		<u> </u>
8	[!	İ	1	1	į ł	1	1	ļ

AMBIENT AIR QUALITY FORM

PROJECT #POSSON ISRT OSIP

FIELD INFORMATION IN USINGLE PD-2

LOCATION	% 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PiD ppm	FID ppm	COMMENTS	INITIALS
PD-2	20-3	0	0.1	2-7	0-6	Background reading	BT
Irsi	20		6.1		0.6		BT
12:20	20-6	0	0-1		0.0		B
12:50	20-6	0	1.4	4.2	0.0	Background 8104.2	BĪ
14:47	20-6	0	0.0		0-0	Background 8104.2 Enclose day	BT
						(
		!					

AMBIENT	ΔIR	CHALITY	FORM

PROJECT 106609X, ISRT, 9917

DATE: 2/2490 FIELD INFORMATION I PICK Striplex PD-2

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
PD-2 2:50	20.2	0	0.0	2.0			B-(
9:14	·	· O	3.4	5-1		Suttrale odor from Wart	BT
9:20			30,3	2028		Shotdown drilling	BT
		_					
	,						
							

AMBIENT AIR QUALITY FORM

ROUX ASSOCIATES, INC. FITE

PROJECT PROPERTY OSIP _ FIELD INFORMATION PD-3 Industriplex 5,10

LOCATION		COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID. com	COMMENTS	
LOCATION PD-3	% O ₂	GASES & LEL	1123 рр.	The ppin	FID ppm	COMMENTS	INITIALS
12:30	:20.2	0	0.0	1.3		Rig downfor reports 2 lan	87
14:30	19.9	· O	0.4	2-1			BT
15:00	20.2	0	0.2	3-7			BT
15:35	20.3	0	0-2	4.6			157
15:55	20.3	.0	0.1	4-6			BT
16:42	20-3	_6	0.1	4.2		Endolday	BT
3/1/90	20.2	0	0:1	0-0			BT
11:00	19-9	0	0-1	0.0	·		BT
11:30	.20.9	0	0-0	0.0			BT
12:00	20-9		0-0	0.0			37
13:30	19.9		0.0	0.0			BT
14:00	19-7	Ö	.0.0	0-0			CAG
14:50	19.8	0	0-0	0-0			BT
15:37	21-1	· 0	0.0	0-0		Endolday	Lener

AMBIENT AIR QUALITY FORM

PROJECT 16101 ISRT PDE DATE: 3/1/90

DATE: 3/1/90 FIELD INFORMATION _____

LOCATION	z 0,	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIA
ATG3 0:45	20.2	0	0.1	0.0		Startup	BT
77B-3 1:00	19.9	0	0.1	0-0			<u>BT</u>
ATB-3 11:30	20.6	0	0-0	0.0			BT
ATB-3 12:00	209	1%	0.0	0.0			87
ATB-3. 13:30	19.9	1%	00	0.0			BT
ATB-3	19.7	0	0-0	0.0			Ju 4
14:00 ATB-3 14:50	19.8	0	0.0	0-0		ż	OT 1
14:50 AT/3-3 15:37	21.1	0	0.0	0.0		*	7,
6:07	•					End of Day	lu
				÷.		/	
		1.					

ROUX ASSOCIATES, INC
PROJECT | 610 | SRF POST

____ FIELD INFORMATION ______

LOCATION	% 0 ₂	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
ATB-3 8:30 ATB-3 9:00	20.9	0	0-0	0-0		Startus	BT
ATB-3 9:00	19.9	ō	0-1	0.8		Start up Endal Boring	BT BT
							
							
			· · · · · · · · · · · · · · · · · · ·				
				<u> </u>			
				 			

PROJECT 100009Y, ISRT 031P

FIELD INFORMATION TICUSTIPLEX PD-4

LOCATION	7 02	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
10-15	20-1	O	1-0	0-0			BT
10:45	20.3	0.	0.2	0.0			BT
(1:15	20.4	Ö.	0-1	0.0			BT
11:40	. 20.7	0	0.0	0.0			137
12:15	20.9	0	0-0	0-0			AT
13:45	21:0	0	0-1	0.0			BT
14:15	20.7	0	0.0	0.0			137
14: 42	20.5	0	٥-٥	0-0			BT
13:15	19-8	0	0.0	0.0			BT
15:45	21.0	0	0.0	0.0			BT
						[1] I	. ,

PROJECT (1950), ISRT COIP
DATE: 3/7/10 FIELD INFORMATION [1] CUSTOPEX PD-5

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
PD-5	21-0	0		0.2	1.0	Hisprobe-failed	BT
12:05	21.0	·O		<u></u>	0-0		BT
12:30	21-0	0		0.0	O-0		BT
	<u> </u>						
				40			
L		<u> </u>	<u></u>				<u> </u>

PROJECT #00009Y, ISRT GSIP

FIELD INFORMATION Industriplex PD-6

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
9:13						Satuponhole	11.
9:30				0-0	0.0	Saturon hole Gasted Guilad	11.
10:00	•			.0.0	0-0		11.7
10:10				6.0	0-0		NE
10:45		<u> </u>		6-0	0-0	<i>U</i>	11 00
11:10				0-0	0-0		111
li:us				0.0	0-0		1/11
12:00				6-8	8-0		Ma
13:30				6.0	00	EndofDay	107
13:30 3/4/90 loyi	21.2	1	0-0	60	0.6	,	BT
11:45	20.9	0	0.0	0.0	0.0		BT
14:00	20-4	0	0-0	0-0	C-0		BT
14:30	21.0	Ö	00		0-0	PID critically low	BT
15:05	21.1		0.5		0,0	F 1 1 1	PST .

PROJECT 660 ISRT POT DATE: 3/9/90

__ FIELD INFORMATION _____

کند :DATE	14110	FIELD INFORMALI	UN			•	1
LOCATION	7 02	COMBUSTIBLE GASES % LEL	H ₂ \$ ppm	PID ppm	FID ppm	COMMENTS	INITIALS
10:40	21.2	1%	0.0	0.0	0.6	Start drilling	BT
1(:15	21.1	0	.00	0-0	0-0		BT
11:45	20-9	0	0-0	0.0	0-0		BT
14:00	20.4	0	0.0	0-0	0.0		BT
14:30	21.0	0	0.0	:	0-0	PIDCritically low	BT
15:05	21-1	1%	0-0		0.0		BT
13.05							
			÷				
•							
· ·						`	
<u> </u>							
<u> </u>							
			·				

PROJECT #05500%, ISRT 65IPDATE: 3/10/90

FIELD INFORMATION - INCLUSTRIPLEX PD-6 + PD-3

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	сомментѕ	INITIALS
8=30 8=30	209	0	0-0	0-4	,		BT
9:05	21.2	ı	1.7	1.0			BT
9:30	21-3	0	10-2	1.5			BT
13:30						Satupon PD-3	051
13-43	21-0	. 0	0.6	0-0			BT
14:43	20.8	.0.	1.	0.0			35
15:20	21-0)	1-7	0.0			57
					-		

PROJECT POSSOSY, ISRT GSIP DATE: 311 190

% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
21-0	\circ	1.1	0.0			BT
	0	0-2	0.0			BT
21,3	D .	0-3	0.0			BT
. 20.3			0.0			BT
			0.0			BT
						BT
70.4			_		PIP buffery olied	BT
20.9	8	0.8.				BT
						B7
<u> </u>			-			BT
		2-1	_		End of dalling	137
	<u> </u>				211001 0011	,
	21.2	21.0 0 21.2 0 21.3 0 20.3 0 20.3 0 20.9 0 21.3 0	20.2 GASES X LEL H ₂ S ppm 21.0 0 1.1 21.2 0 0-2 21.3 0 0-3 20.3 0 0.3 20.3 0 0.4 20.9 0 0.4 21.0 0 1.1 21.3 0 2.0	21.0	21-0	21.0 0 1.1 0.0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

ROUX ASSOCIATES, INC
PROJECT 16101 ISRT PD F
DATE: 3/12/90

DATE: 3/12/90 FIELD INFORMATION ____

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
ATB-3							Jen &
10:00 ATB-3	 			0.0		· · · · · · · · · · · · · · · · · · ·	~
H715-3 11:15			•	0-0			Jar.
11: 45 ATB-3 ATB-7				0.0			JA9
ATB-7 14:15			•	1-0	2-4	Oasteen Sailed.	MA
ATB-7				3-0	1.0		my
14:50 ATB-8 16:15 ATB-8				2-0			Jon 4
16:45				3-2		Endof Day	mq
:					· .	(
	•						
		,					
	1						

PROJECT 16101 ISRT PDIDATE: 313/90

__ FIELD INFORMATION _

LOCATION	7 02	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
2:20	21.3	2%	2.1	1-3			BT
8:50	21.1	2%	1.9	2.0			BT
9:20	21.2	1%	2.0	2.1			BT
10:05	20.6	0	1.9	2.6			BT
10:35	20.4	0	1.6	2.9			BT
10:50						H2S probe failed	BT
11:05	20.2	3		3.1			BT
11:30	21.1	3	1.5	3.0		μ	BT
12:20	20.2	0	0	0.0			BT
13:00	20:6		2.5	0.0			W8
13:25	20.4	0	2.5	0.0			UN'T
14:00	21.0	O -s	2.5	0.0			th of
		-					

PROJECT 1610 1 ISRT PDZ DATE: 3/14/90

_____ FIELD INFORMATION _____

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
2:30	21.0	4%	4.1	0.0		Startue	BT
9:05	20-9	0	0.2	0.0		V	BT
9:35	21.1	0	0. 3	0.0		·	BT
10:00	21.1	0	0.4	0.0		·	BT
10:30	21.4	0	0.4	6.0		End of Bounce	BT
				·			
·			``			······································	
·	•						
				· <u>.</u>			

			AMBIENT	AIR QUALITY FO	RM		
ROUX ASSO PROJECT # DATE:	CLATES, INC DE OCCOUNT SRT OSIF	FIELD INFORMATIO	DN _ D	7 + PD.	- 5		
LOGATION	% O ₂	COMBUSTIBLE GASES % LEL	H _Z S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
0915			000	0.0			Cu 4
0955			000	0.0			m'T
1025			000	0.0			Cu 8
1055			001	0.0			Jui-
1175			00/	0.0			Las-
				///			
1345			00/	0-70			Jan-8
1415			ರಿಕರ			Short down PiD at 19	1: plan
1445			ව೦ ೮				149
1515			00/				Cher
1515			000				du T
		· · · · · · · · · · · · · · · · ·					

4-00

PD-5

PROJECT PROJECT ISRT

TE: 3/19/90 FIELD INFORMATION _____

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS		INITIALS
PD-9 9:30	20.8	0	0.0	0.0				BT
PD-9 10:00			0.0	0.0				HH
PD-9 10:35		0	6.1	0.0				HH
PD-9 11:08	_	0	0.7	0.0				HH.
PD-9 11:43		0	0.0	0.0				1111
PD-9 12:20	21.1		6.0	0.0				
PD-9 12:55	21.1	٥	0.1	0.0				
PD-9_14:15	20.2	1	0.0	0.0				
PD-9 14:45	20.7	2	0.0	0,0				
PD-9 15:40	_	.3	0.0	0.0				
PD-9 15:31	21.4	4	0.0	0.0				
								
	{ • •						1 6	

PROJECT #06600X, ISRT CSIP

ATE: 3/20/90 FIELD INFORMATION PD-2

PD-2

LOCATION -	% O ₂	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
0900			000	0.0			Line
0945			00 0	3.0			Su 7
1015			000	4.7		For 1654 15 minutes	100- Ft (11.8
1045			000	3.7		Double-beded with	1 Carted 4
1115			000	3.9			Zin = 7
1145			000	2.7			Ila 4
1230			DG 0	3.8		·	Cin c-
1300			000	5.6	,	Will monton close of evaling necessary	i qui
1340			000	5.3		was as hip as 7.0. Comer 5 pm. At 2001 Plb read = 0 pm.	considerly May
1430			060			1	1 /
1500						Short down PI	# 5 mly Cur

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H _z S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
PD-10 9:10	21.1	0	0,0	0.0	1.0	Background Roading	BT
PD-10 9:45		_ 0	0.0	0.0	1.0)	BT
PD-16 10:20		0	0.0	0.0	0.0		BI
PD-10 10:49			0.0	0.0	0.0		Ø (
PD-10 11:20		0	0.0	0.0	0.2		1/1/
PD-10 13:00		0	0.1	0.0			HH
PD-10 13:30		0	0.0	0.0	0.1		HH.
PD-11 15:20		0	0,0	0.0	0.0	Background Rading	1/1.
PD-11 15:50		0	0.0		0.0	Shut off PID-low J bottery- Weather-Rainy, high howidit	HH.
PD-11 16:20		0	0.0		0.9	The second of th	BT
	- Ga 13:		<u> </u>				
					e i		

ROUX ASSOCIATES, INC PROJECT #966699, ISRT 931P

DATE: 3/21/90 FIELD INFORMATION _____

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
PD-11 8:00	20.7		٥.٥	0.0	0.0	Background Readings.	HH.
PD-11 8:30		0	0.0	0.0	0.0	WINDY, RAINY, COLD.	HH.
PD-11 9:00		/	0.0	0.0	0.0		MH.
PD-11 9:55		0	0.0	0.0			KH
PD-11 10:25	}	/	0.0	0.0	0.0		1/1/.
PD-12 H:45		0	0.6	0.0		Background Readings. FID-Hz supply out	HH.
PD-12 15:08		0	0.4	0.0		PARTLY CLOUDY.	44.
PD-12 15:40		0	0.4	0.0			HH.
·	·						

ROUX ASSOCIATES, INC POT PROJECT #00009T, ISRT 05IP

80-2

DATE:3/_	21/90	FIELD INFORMATION	1 79-2				
DATE: 3/	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
0800			000	0-0			de 15
Un 10830			000	0.0			de. 1
0845						That down fis sed H25/	in T
	·						
g g	1 6	F 5	5 6				

ROUX ASSOCIATES, INC
PROJECT #96500*, ISRT #98P

_ FIELD INFORMATION

	I	l	.	1	1	1	1
LOCATION	7 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PfD ppm	FID ppm	COMMENTS	INITIALS
PD-9 8:20	19.7	0	0.0	0.0		Background Readings	HH.
PD-9 8:30	19.7	0	0.0	0.0) '	HH.
PD-9 9:00	20.1		0.0	0.0		Did cated law tribers	EH.
PD-9 9:35	20.6	0	0.0	0.0	ļ	PID indicated law tentery PID turned off. Will continue to take readings every	EDE XX
PD-9 10:05	19.7		0.0	0.0		7	HH.
PD-9 10135	20.5	0	0.1	0.0		Switched from	HH.
PD-9 11:20	21.2	0	0.0	0.0		Microtip PID to OVM PID.	pe 19
PD-9 11:40	20.9	0	0.0	0.0		2	in c

PROJECT POSCOOTY, ISRT OSIP

DATE: 3/23/90 FIELD INFORMATION _____

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
PD-8 8:65	21.3	_ O_	0.0	0.0		Background Readings	11/1
PD-8 8:31	21.3	0	0.0	0.0			1/1/
PD-8 9:00	21.0	0	0.0	0.0			1/1/
PD-8 10:06	21.0	0	0.0	0.0			611
PD-8.	20.9	0	0.0	0,0			11/1
PD-8 11:30	21.0	0	0.0	0.0			HH
PD-8 12:00	21.5	0	0.0	0.0			1/4/
PD-8 12:23	20,9	0	0.0	0.0			144
PD-8 13:00	20.7	0	0.1	0.0		6	Ja:
PD-8 13:30	20.1	0	0,1	0.0			1/1/
4 f							

PROJECT 10009, ISRT CSIP DATE: 3/26/90

DATE: 3/26/90 FIELD INFORMATION _____

	, 1	1	ı	ı	!	1	1
LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
0900						GROUTING I LANDSCAPING	1/1/
PD-8	21.5	01	0.1	<u> </u>		GASTECH GX-82	7/1/
PD-4	211	_			•	BACKGROUND READINGS	4/4/
13:53	21.6	0	0.0	0.0			(///
PD-4 14110	21.0	0	0.0	0.0			1/1/
PD-4 14:40	20.3	0	0.1	0.0			4/4/
PD 4		<u> </u>		1	 		1 11
15:10	20.6	0	0.0	0.0			7/7/
PD-4 15:40	20.0	0	0.0	0.0			1/1/
PD-4	0.0					Low Battery Indicator	1/1/
16:10	21.0	02	0.0	0.0		on HZS Meter	C.C.
PD-4 16:45	21.2	02	0.0	6.0			1/1/
PD-4 17110	21.4	02	0.0	0.0		CORED AT 17:25. HZS Meter shut off. Praining battery on PID	1/4.
17/10			0.0	0.0		praining pattery on Pill	r z
						1	

PROJECT LOSCOPY, ISRT OSIP

 $= \frac{5/3 + 190}{}$ Field information

LOCATION	7 O2	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
PD-4						graving borehole PD-4	1/1/
7:50	20.9	· 1	0.2				M
10-4	<u>.</u>		\				1/4/
8:20	21.0	.0	0.0				V/
PD-4 2-30	21.0	0	0.0				MM
PD-4							1/1/
9:00	21.0		0.0	0-0			MA
PD-4 9:30	20.3	0	0.1	0.0			1/1/
PD-4						holegrated	1/4/
10:00	20.2	0	0-0	0.0	-		10 /0
13:48	19:7	0	0-1	0.0			NH
PD-10	21-5	0	0.0	0.0			1/1/
19200							1///
14:30	21-0	0	0-0	0.0			KI TO
ا تص	21.0	0	0.0	0.0			KK
15:30	20.7	0	0.0	0.0			M
15-55	21-0	0	0-0	0.0			MH.
16:30	21-1	0	6.3	0.0		Microtip towbattery Switch to OUM(PID)	1/1/
. 17 % 3		E E	€ ○!	101	1		1/1

ROUX ASSOCIATES, INC

DATE: 3/28/90 FIELD INFORMATION _____

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
PD-10						FID notworking properly	211
8:12	20.6	1	6-0	0.0		3 /	11/1
PD-10							11.11
8.20	20.4	1	0.0	0.0			HH.
PD-10							11.11
8:50	21.1		0.0	0.0			CR
10-10	·			1			1/2/
9:20	. 21.3	2	0.0	0.0			K/K
PD-10.] .	}					14/4/
4:50	21.0	<u> </u>	0-0	6-0	ļ		1/1/
PP-10							12/4/
10:20	20.3		01	00	<u> </u>	<u></u>	K'K'
PD-10	1 22 (2)	1					1/1/1/
11:00	21-0	.1	0-1	0.0	<u> </u>	<u> </u>	11/1
PD-10	1011	ı		ව්ථ			1/1//
11:30	21.1	 	0-1	100	<u> </u>	 	<u> </u>
PD-10	210		0-1	0-0		}	1/1/
12:00 PD-10	1-100		<u> </u>	 0.0	 		(1)
13:00	20-6	0	0.2	0.0			144
PD-10	200			10-0			1/.//
13:30	21.1	•	0-2	0-0			7/7/
PD-10							4/1/
14:00	21,1	ł	0.2	0-0		1	KN
PD-10		•		1			1/1/
14:30	-21-0	1	0.1	0.1			[7/17
PD-10							1/1/
15:00	21-0	4	0.0	0.2			11/1/1/

FIELD INFORMATION ...

LOCATION	7 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
10-10		O	<i>خ</i> بـ	A (1			1/4/
15:30 PD-(0	21,0		0.0	0-4			7/./
16:00 PD-10	21.1		-0.L	0.5	<u> </u>		NH
16:40						PID Buffery law turn fipon every to hour Endofday	1/4/
16:40 17:00	21.2	1	0.0	1-2		Endotday	1/1/-
,							
- · - · · - · · · · · · · · · · · · · ·	*			-			
	·						
							
							<u> </u>
4 E			5 5				

PROJECT 100000 ISRT 001P

DATE: 3/29/90 FIELD INFORMATION _____

LOCATION	% o ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS_
8:25							11-
PD-10	20.6	0	0.0	0.0		Buckground readings	B.T
8:55							1
PD-10	20.7	0	0.0	0.0	<u> </u>	15 Minute Break fordulloss	D-1
9:40	201		0.1				10-
PD-10 10:50	20.6	0		0.0	 	Downline need Chainwreadia	125 (
PD-10	20.4	٥	0.1	0.0			7/1/.
11:05.			·			Oriller Smelled Something!	1/1/
PD-10	20-6	0	0.2	0-0			MM
11:35					j		1/4/
PD-10	20-7	0	0-2	0-0			N.C.
	220	6	A		İ	11 11 1/112	1/4/
13:30	20.2		0.7	0.0		Lunch break/Water Run	11.11
PD-10	.20-3	0	0.0	0.0		/	1/1/
14:00	·						7/4/
PD-10	20.4		0.0	0-0			[//[/
14:33]					1/4/
PD-10	20-5		0.0	0.2	ļ		K! L!
15:00	200	0	0.0	3-8			14/4/
PD-10	20.8	<u> </u>	0.0	3-6		Ch. L. J. do'lles raged	11/1
PD-10	20.5	2	0.1	3.2		Shut down drilling operator	174 74.
1.0-10			<u> </u>	1	 	COTH 1113 TRUE TATION	
		į					

PROJECT COORDS, INC

ATE: 3/30/90 FIELD INFORMATION _

LOCATION	x 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
8:00 PD-10	21.0	/	0.0	0.0		BACKGROUND 1,7-PID (PID - OVM)	44
8:10 PD-10	21.3	0	0,1	0.0		Weather cold, wiridy, cloudy, humid, snow	1/6
8:40 PD-10	21.4	0	0.1	0.0			7/1.
9:10 PD-10	20.4	0	0.0	1.7		Finished coring 9:30 Break to 9:45.	HH
9:50 · PD-10	21.4	0	0.0	1.7		Drillers Decon 10:15	HH.
10:30 PD-10	21.4	0	0.0	1.7		Started Grouting	7/1/
11:66 PD-10	21.3	/	0.1	1,7			1/1
11:30 PD-10	21.4	0	0.0	0.0			HH.
12:00 PD-10	21.3	/	0.0			LAMPOUT ON OVM CHANGED TO MICROTIA	1/1
Z:10 PD-10				0.0		LUNCH 12:15-12:45 (MICROTIP)	WH,
12:150 PD-10	21,5	0	0.0	0.0		1300 GROUTED END OF DAJ.	1/1/
				1			
1 1							ı.

ROUX ASSOCIATES, INC PROJECT ASSOCIATES, INC

DATE: 4/2/90 FIELD INFORMATION _____

	1	COMBUSTIBLE	41.6.	DID	TLV SNIFFER		
10CATION	7 O ₂	GASES % LEL	H ₂ S ppm	PID ppm	- FIB ppm	MONITORING WITH HZS HETER,	INITIALS
PD-11	20.5		0.0	3,3	0.0	OND TLY SNIFFER. TAKING READINGS EVERY 'IZ HOUR WITH MICROTIP.	HH.
10:00	24		_		, ,	CLOUDY 40°F.	4/1/
PD-11	20.6		0.0	3.8	1.0	l	11/11
10:30 PD-11	20.5	0	0.0	4,1	0.0	TLV SNIFFER WAS NOT CALIBRATED TO SCOPPM HEMANE, RENTAL CO. NEEDS TO SHIP IT TO WOBURN.	HH.
11:00 PD-11	20.6	0	0.0	4.8	0.0		1/4
11:30 · PD-11	20.5	0	0.0	3.7		HAVING PLOBLEMS WITH JUIFFEL, YELY SENSITIVE TO CAR EXHAUST BUREHOLE NEAR KLAD & PANKING LOT, READING RANGING FLOND	1/1/
12:00 PD-11	20.2	0	0.0	3.6		LUNCH BREAK	1/6.
13.15 PD-11	20.6	0	0.0	3.6		TRIED TO ZERO TLV IN- SIDE CAR. READINGS WERE ZOTPOM. SHUT DOWN - WALTING FOR CALIBRATIONAL	NA
13:145 PD-11	20.5	0	0.0	3.4			1/1/.
14:15 PD-11	20.5	0	0.0	4.2			7/1/
14:40 PD-11	20.3	/	0.0	3.5			11/1
1500 PD-11	20.5	0	6.0	4.4			HA
15:30 PD-11	20.5	0	0.0	7.0		MICLOTIP BACKGROUND READING WHEN TURNED ON WAS JIBPM	HH
16:00 PD-11	20.6		0.0	6.6			1/6/
16:30 PD-11	20.5	/	0.0	8.8		MICROTIF BACKCROUND READING WHEN TURNED ON WAS 7:6	1//

PROJECT #05500Y; ISRT OFF

____ FIELD INFORMATION _____

LOCATION	z 02	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	•	INITIALS
17:00 PD-11		0	0.0	7,8				1/1/
17:35 PD-11	20.6	0	0,0	7.1			· · · · · · · · · · · · · · · · · · ·	1/1/
7D-11	20.6		0,0	/ / /				C'AI ·
,								
			,					
· · · · · · · · · · · · · · · · · · ·								
							······································	
}								
		£ £		E 6	£ 6 1		į į	Ĩ

ROUX ASSOCIATES, INC PROJECT #86000000, ISRT 800P

DATE: 4/3/90 FIELD INFORMATION _____

LOCATION	7 O2	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
PD-11	0.					VERY HOMID, CLOODY, 409	1 -4/4/ 1
8:00	20.0		0.0	0.7		BACKGROUND READINGS	Tre.
PD-11 8:65				1.9		BACKEROUND REATINGS WENT UP TO 1.9 FOR	1/1/
DD-11			<u> </u>	/ 		BACKGROUND READINGS	
8:06				2.2		WENT UP TO 2,2 PPM FOR MICROTIF.	7/1/
8:10	20.5	1	0.0	2.1			7/4/
PD-11	30,5		0,0	X.1		FINISHED CORING	
8:40	20.7	/	0.0	3.1		15 MINUTE BREAK	WM
PD-11	20.5	0	6,1	4.2.			1/1/
9:40 PD-11	00.0		0 , ,	7,00.		PID BACKGROUND	(1/()
10:10	20.7	/	0.0	7.3		READING 4.6	7/1/
PD-11		į					1/1/
10:45					<u> </u>	FINISHED GROWTING.	MAL -
		<u> </u>					
					<u> </u>		
[l	<u>'</u>			[, , , , , , , , , , , , , , , , , , ,

PROJECT 160 ISRT POI DATE: 4/490

MATE: 4/4/90 FIELD INFORMATION 50 F Foggy Humid

Ì				<i>'</i>			
LOCATION	7 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PIO ppm	TLV 500 ppm	COMMENTS	INITIALS
9:30 HTB-13	20.3	.0	0-0	4-4	0	Background Reading	HH
9:50	21.2	0	0.0	4.6	0	Background Reading Start up drilling	WH
10:15	215	6	0.0	3-1	0		HH
103	21.3	O	0-0	3-4	0.5		WH
11:00 .	21-3	1%	50	3.6	0		HH
11:30	21.5	1%	0.0	3-3	12		4/1
11:45	21.5	18		7-3 12-0	36 12	TLV reads 12-0 atborelde 36 ppm 10 from workzone	7/1/
12:50	21-7	O	٥. ٥	4-0	С		MH
13:00	21.7	1%	0-0	3.5	0	TLV Bullery is out	HH
13:10	·24-7	12/6	2.0	22			HH.
13:35	:21-7	Ď	C)-O	2.3			4/4
13:55	21.7	0	0-0	2-5		Ĵ	44
14:20	21.8	1%	0-0	2-1			HH
14:50	21.9	0/	€-1±	3-3			1/6/1

ROUX ASSOCIATES. INC PROJECT 16101 ISRT PD1

DATE: 4/4/90 FIELD INFORMATION

LOCATION	Z 02	COMBUSTIBLE GASES % LEL	H _z S ppm	PID ppm	FIO ppm	COMMENTS	INITIALS
15:20			_	3.1			1/11
ATB-13	21.8	.0	0-0	3-1	 		11/1
15:50	21.8	10/0	0.0	3.6		,	WH
1478-13	41.5	10	9.0	13.0	 		1.
	217	1%	0.1	2.3		·	1/1/
16:40			·			Microtyp reads low bullery	4/21
17-13 17-15			<u> </u>	0-0		NOW USING OVAL BACKUP	17/
						1 1 1 1 1 1	1/4/
ATB-13	· 				 	End of Duy	
	•						
				<u></u>			
<u> </u>							
<u> </u>							
 							
	1	1	1		1		

ROUX ASSOCIATES, INC

PROJECT 16101 ISRT PD/
DATE: 4/5/90 FIELD INFORMATION Partly Cloudy 45

LOCATION	7 O2	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	TLV _FHT ppm	COMMENTS	INITIALS
2:10						2	2/1/
ATB-13	19.8	0	0-0	0-0	0	Buckground readings	7/1/
8:15						J J	1/1/
#7B-13	19.9	0	0-0	6.0	0		MI
8:45 H7B-13 4:15	20.4	12	6-6	0-0			7/11
4:15							1/2/
ATB-13	20-7	16/6	0-0	0.0	7		7771
9:50 . A TB-13	20-7	1%	0.0	0-0	10		HH
10.25		1					11/11
71-T/3-13	20.5	.0	0.0	0.6	16		NA
11:10 ATB-13	204	Ö	0.0	0.0	16		44
11:40 ATB-13	. 19-9	0	0.0	0-0	16		44
11:45			0,0			Alarm Sound aton TLU	
A713-13	20.1	0			24	Hlain Stopedet 11:47	7/7/
1860						111111111111111111111111111111111111111	0101
ATIS 13	.20-4	0	0.0	0-0	0		777
13:45							2/2/
H (13-13	240	0	0.0	0-0	0		
14:15	_			<i>-</i>			4/4/
H 113-13	20-9	. 0	0.0 .	0.0	0		
HTB-13	263	0		00	0		HM
15:20	21-3	1%	0.0	0.0	4		4/1

PROJECT 1610 | ISRT PD1
DATE: 4/5/90

_ FIELD INFORMATION ______

LOCATION	7 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	TLV SHO ppm	COMMENTS	INITIALS
15.45							11 11
ATB-13	21-4	0	0.0	0-0	ت, ا		HY
16:20							الدار
A713-13	21.0	100	1.6.0	0-0	1.0		10/1
16:40	_]		TLV Battery extrasted	1/2/
ATB-13	21-1	110	0.0	0.0			AY AT
1	2,2						1/1/
ATB-13	21.2	1%	0-0	0-0	<u> </u>		KI KI
17:45	212	1 10/			}	EnlosDay	L/L/
HTB-13	21.2	1%	0.0	0-0	ļ	"End of Lay	XYXY
,					}		
			<u> </u>	[
1						1	
			<u> </u>	-	 	 	
	1				<u> </u>		
<u> </u>							
						1	
							j
· .			; ,			1	
]
					1		
	}					}	}
i i		!					1

PROJECT FEED INFORMATION Cloudy Slightly humid 40°

LOCATION	7 O2	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
7:55	20.9	0	0-0	1:1		Buckgroundreading	7/1/
\$-00	20.9	0	0-0	1-1		1900000	44
8:30	20-1	0	0-0	1-4			WH
9:00	209	0	0-0	1.5			1141
9:30	21-0	0	0.0	2-2			1/4/
10:00	.21.0	٥	0.0	1-3			11/1
10:30	. 20.1	0	0-1	0.0			A.H
11200	21-0	0	0.1	0.0			SH
11:30	20.9	0	0-1	0-0		Complete boring	WA
							`
£ 1	I I	E B	\$ F				

Octob

AMBIENT AIR QUALITY FORM

ROUX ASSOCIATES, INC PROJECT | 10 | ISRT PDE DATE: 4/9/90

_ FIELD INFORMATION _

LOCATION	7 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	TLU ## ppm	COMMENTS	INITIALS
AD-14 6900	21.0	0	0.0	G-0	1.0	Background readings	BT
09:30	20.6	D	0-1	0.4	0.0		Bi
10:04	19.9	D	0.2	0.0	Ð. 0		DT
1030	19.9	D	0.3	D - D	3. 0		BT
l(-00	21.1	0	0-0	0.0	0.0		BT
11.30	21.2	0	0.1	0-0	2.0		BT
12:00	21.1	D .	oj.	0-0	0.0	,	BT
12 30	21.2	0	0-1	0.0	Ø.0		BT
13:20	21.2	0	0.1	0.0	0.0		BT
13:55.	21.1	٥. ا	6 .0	0.0	0.0		BT
t4 - 30	20.3	0	۵۰۵	0.0	0.0		RT
12:20	21.0	0	6. O	60	0.0		BT
15:40	20.6	. 0	0. 0	0.0	0.0		BH

PROJECT POSSORY (ISRT OFFE

TE: 4/9/90 FIELD INFORMATION ____

LOCATION	7 O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	ナレン - 510- ppm	COMMENTS	INITIALS
16:10	20.8	2	0.0	0.0		TLV battery (ow	111
16:45	20.4	2	ბ . 0	0. 0		The battery low	1111.
						/	
,							
					_		
·	·						

A	MBIENT	. AID	OLIAL	ITV	EVOU
м	MACHEIVI	AIR	UUAL	<i>)) 1</i>	LULIA

PROJECT ! Clal ISRI ISRT POT

FIELD INFORMATION Cloudy, Humid JoT

LOCATION	x 0,	COMBUSTIBLE GASES % LEL	H _a S ppm	PID ppm	TLV _FIO ppm	COMMENTS	INITIALS
2:00							1/1/
ATB-14	21.0	0	0.0	05	0	Background readings	7727
\$:10							4/1
ATB-1	4 21.0	0	0.0	0.5	0		V7 [/
B:40 ATB-1	4 20.9		0.0	0.9			1/1/
9:10			•				4/1
ATB-14	209		0-0	10	0		MM
10:15							1/2/
ATB-14	70.9	<u> </u>	0.0	1-4			
10:40				·		100 11	HA H
ATB-14 10:45	20.9	1-0-	00	1-5-	0	Gin Styled	-King
ATB-	J	6		1.5	0		1/1/1
11:15	4 20.1	<u> </u>	0.0	1.2			(1)
ATR-1	4 20.7		0.0	1.9	0		7171
11:45	•						1/4/
ATB-19	4 20.7	0	0.0	2.5			1/1/
							1/4/
ATB-14	20.7		0.0		0	 	(///
12:50	20.8	0	0-0	1.7	0		1/4/
13:30	20.4				 	 	1/0/
ATB-14	20.7	6	0.0	0-0	10		11/1/
1420							1/4/
ATB-14	20.8	0	0.0	1.0	0		1///
14:45 ATB-4	20.5	0	0.1	0-0	0		HA

			•
AMBIENT	AIR	QUALITY	FORM

ROUX ASSOCIATES, INC

PROJECT 1610 | ISRT PDI _ FIELD INFORMATION Cloudy Hamid 500

LOCATION	Z 02	COMBUSTIBLE CASES % LEL	H ₂ S ppm	P10 ppm	TEV ATO ppm	COMMENTS	INITIALS		
15:15	203	0	0-1	0.4	0		1///		
ATB-14 15:45							1/2/		
ATB-14 16:15	20.1	0	0.1	05	10:0		KY K'		
16:15 ATR-14	20.1	٥	00	1.3	0	Endof Day	HH		
			-	{					
	·		<u></u>						
			······································						
						-			
			÷						
	,								
					,				
			·						

16101 ISRT FDI

LOCATION	π o ₂	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PIO ppm	TCV SID ppm	COMMENTS	INITIALS
9:35	200	0	0.0	7.8	0	Buckground reading	1/1/
9:45	20-0	٥	0.0	9.0	0		1411
10:15	20.0	Ö	0.0	2-8	0	Weather is cleaning	1/1/
10:30	20.1	16	0-1	2.3	٥	Jestiner is claiming	1111
11:00 .	209	0	0-1	0.0	0	clearsky	1/1/
11:35	20.0	16	0.1	0.0	0	1	HH
12:00	20-0	10	0-1	1.0	0		4/4
12:45	20.4		6.0	1.0	10	Background Reading	1/1/
13:00	20.5	0	0.0	1.7	0	300.00	4/4/
13:35	20.3	٥	0.0	0.9	0		HH
13:45				1.7		Brigger Alending	1181
14:20	26-3	16	0.0	1.5	0	Julia - Lauring	40
14:40	20.6) 6	0.0	1.2	0		WH,

	• •		•
AMBIENT	AIR	QUALIT	Y FORM

PROJECT | GO | ISRT PDI

FIELD INFORMATION Clear

LOCATION	x 02	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	TCV FTD ppm	COMMENTS	INITIALS
15:20	20.2	18	0.0	1-1	0		HA
15:45	20.6	10	0.0	1.9	0	·	dh
16:25	20.1	6	0.0	1-1	D	EndofDy	4/1
•							
						:	
•		·	· `.		·	:	
-	·						
						· .	
	·			•			
			·				
] _

__ FIELD INFORMATION _____

LOCATION	7 0 ₂	COMBUSTIBLE CASES X LEL	H ₂ S ppm	PIO ppm	TLV SIO pom	COMMENTS	INITIALS
8:39 ATB-15	21.0	16	20	0-6	0	Bickground Rading	1/1/
3-45 ATB-15	20-9	26	0-0	1-2	0		MA
9:15 ATB-15	20.0	2%	·0.0	1-4	5	· ·	4/4
10:00 ATB-15	21.2	2%	0-1	6.4	0	•	44
10-30. HTR-15	26.9	.2%	0.1	0.3	7		HH
11:00 ATB-15	209	16/6	0.1	0.7	O		HH
11:30 ATB-15	20.9	1%	0-1	0.7	0		W/
12:50 1478-15	26-7	°/e	0-10	0.0	0		68
13:10 HTB-15	20.4	0	6 -0	6-0	0		6/6
13:40 HTB-15	20.6	1%	0-0	0-0	U		del.
14=30 ATB-15	20-6	1%	0-0	0-0	0,		B7
15:00 1473-15 15:30	207	1%	0-0	0-0	0		BT
17B-15.	208	1%		0-0	0		131
16:03 ATB-15	21.0	1%	0.0	0.0	0		BT

		••	-	•
AMBIENT	AIR	OUAL	ITY	FORM

PROJECT 161 01 PROJECT 161 1701

DATE: 4/12/90 FIELD INFORMATION _____

LOCATION	x 02	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	TEV ppm	COMMENTS	INITIALS
16:30 ATB-15	20.9	1%	0-0	0.0	0		BT
17:00 ATB-15	20.4	10/0	0-0	0-0	0	Start Corina Gedication	BIT
17=30 ATB-15	21-2	1%	6-0	0-0	0	Start coring advite	BT
			·				
•							
						·	
			·				
·	•		-			·	
		·					
					·		
				• •			

ROUX ASSOCIATES, INC
PROJECT 16101 ISRT PDI
DATE: 4/13/90

FIELD INFORMATION _____

	LOCATION	7 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	TLU ppm	COMMENTS	INITIALS
	8:00	20.0		. 0.0	0.0		Buckgrown Neading	BT
	#7B-15 2:05					0	Dichground Heading	
-	A-TB-15	19-8	10/6	0-0	0-3			BT
	8.40 ATB-15 4:10	20.2	0	0.0	0-0	0	Clear 45°	BT
	ATB-15	20.4	0	0.0	0-0			BT
	9:45 . ATB-15	21.0	0	0-0	0.0	0		BT
	10:15 ATB-15	21.2	0	0.2	0.0	0		BT
	0:50	19.8	6	0-0	6-0	0		BT
	ATB-15 1:15 ATB-15	206	Ö	0.0	0.0	0	End of growting	BT
		,						
	,						F	
-					·····			
-								

ROUX ASSOCIATES, INC
PROJECT 16 101 ISRT PD1
OATE: 41690

FIELD INFORMATION SUNNY 540

		_	ر_				
LOCATION	7 O2	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	TLV Methodie	COMMENTS	INITIALS
9:30 ABT-16	20.9	٥	0.0	0.7	0	Buckyround randings	13-1
9:45 BF16	20.2	0	0.0	1-1	,	Odor frombole	BT
10:00 ABT-16	20.3	0	0.0	1.5	0	·	BI
10:30 ABT-16	.20.3	18	0.0	1-8	0		BT
11:00 ·	19.2		0.0	Z.0	0	,	BT
11:30 11:37-16	20.1		0.2	1.9	0		BT
12:00 ABT-16	.21.0	<u>U</u>	0.0	2-8	0		آذا
13:30 ABT-16	21.7	16	0,0	6.0	<u> </u>		BÍ
14:10 HBT-16	21-4	0	0.0	0-0	0		31
19:20 ABT-16.		` `				increating buttery low will run at the intervals	BT .
15:25 4BT-16	26.9	0	0-0	0.0	Ö	Slort sparilling"	أظ
15:40 ABT-16	20-6	0	0.0	0.0	0		PJ .
16:10 ABT-16	21-1	0	0-0	0.0			31
16:50	24 7 #	₩ e	PO:	15-0 ₁		Endat clau	037

PROJECT 1601 ISRT PDIDATE: 4117190

FIELD INFORMATION _____

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
2: 15 ABT-16	21-0	.1 %	0.0	1	0.5		N. 8
1:45 ABT-16	21-2	.1%	0.0		0.5		ing
9:30	21.1	.10	0.0		0,5		ing
10:15	. 21	0	0		0-9	laining	ing
10:30 .						astron Buttery decid	no
11:30	21-3	ي ي	0.0	4.8	0.9	New butlery locostery	in co
12.00	.21.2	1%	0 : O	4_8	1-0		Ins
13:30	-21.3	106	p-0	9.6	1:0		enor
14:00	21-1	0	0.0	4. 8			mer
14:30	21-1		0.0	5.2		,	Ing.
G0:21	211	0	0.0	9-9			In 8
15:30	20:7		0-0	14-9			In
				3.7.			In &

ROUX ASSOCIATES, INC
PROJECT (6/0/ ISRT PD/
DATE: 4/12/90

DATE: 4/12/90 FIELD INFORMATION _____

LOCATION	7 0,	COMBUSTIBLE GASES % LEL	H,S ppm	PtD ppm	 FID ppm	COMMENTS	INITIALS
11:00						0 1 1	11
ATB-12	21.0	18	0.0	0.0	0.6	Backgrand readings	nº8
11:30	015	190	. ~ 1	0.0	2	7	MI
12:00	21.5	10	0.	0.0	3.0		7
ATB-12	21.2	10/0	0.1	0.0	5-5		pred
12:30 ATB-12	21.9	166	0.1	0-0	6.2		Im = 9
13:00 ATB-12	21-3	1%	6.1	0.0	6.6	FID recalibrated by B.T.	Inch
15:30	21-3			<u> </u>	 	C1100+ 1011119	
RB-I	21.6	1%	6-0	0-0	0.6	FID recalibrated by B.T.	Jun 7
16:00 RB-1	-20.2	1%		0-0			min
16:30	-20.2	16	6.0	0.0	0.0		1
RB-1	21.0	0_	6.0	0.4	0-8		ME
17:00		~		~		0100	m of
RB-1	20.6	0	0.0	0.4	0.3	Endof Day	en
					}	/	
ļ		-					ļ

ROUX ASSOCIATES. INC
PROJECT 16101 ISRT PD(
DATE: 4/19/90

DATE: 4/19/90 FIELD INFORMATION _____

	1	1 .	4	1	TLV (meth	ne)	t
LOCATION	7 0 ₂	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	FIO pom	COMMENTS	INITIALS
8:30						2 1. /	/
RB-2	21.0		0.0	0.0	0	Background 6	n-?
9:15 RB-2	20.6	0	0.0	0.0	50		inco
10:30	202	10	0.1	0.0	140	Moveto RB-3 Background reading	Zin 8
RB-3						Sicilar and Garing	
RB-3	20.1	0	0.1	0.0	120		lug
11:30 RB-3 12:00	20.0	0	0.3	0-0	120		In a
12:00 RB-3	19.6		0.1	0.0	120		lnon
12:30 RB-4	20.0	87 25 0	0-1	0-0	70	Move to RB-4	in og
13:00 RB-4	20-8	0	0.0	0-0	110		(a)
13:30 · RB-4	21.2	O	0.0	0.0	110		len co
	-						
						5	
	·						
				· · · · · · · · · · · · · · · · · · ·			
		3					

PROJECT 16101 ISRT PD1
DATE: 4/20/90

FIELD INFORMATION ______

	1	COMBUSTIBLE	Ī	1	l	1	I
LOCATION	7 0 ₂	GASES % LEL	H ₂ S ppm	PID ppm	FIO ppm	COMMENTS	INITIALS
\$:00	20.0	18	0.0	1.9	1 2	Background readings	119
RB-5 8:30	20.8	<u> </u>	0.0	1 • 1	1.2		/
RB-5	21.4	18	0.0	2.2	0.4		In "
8:45 RB-6	21.6	12	0.0	1.5	0.5	Move to location RB-60	lad
9:15 RR-6	21.4	18	0.0	7-1	0-4		la 9
9:55	21.1	0%	0.1	1-(0.9	4	la 8
10:45 RB-7	20.9	18	0.0	0.0	0.2	Movetolocation RB-7	lin of
11:15 RB-7	21-0	Ò	0.1	0.0	0.4		/ln "?
11:45 BB-7	20.8	0	0.1	0.0	0.5		Zin
12:15 RB-7	20.8	9	0-1	0.0	0.5	4	lin °
12:25 BB-8	20.9	O	0.1	0.0	0.6	More to location RB-8	Un of
12:45 RB-9	20.7	0	0-1	0.0	1.0	Moveto location RB94	/m of
RB-2	20.7	0	0.4	00	1.0		In T
13:45 RB- 2	20.8	. 0	0.4	0.0	1.2		my
14:15 Re,a	20.6	0	0.4	050.1	1.4		In t

ROUX ASSOCIATES, INC

PROJECT 16101 ISRT PD 1
DATE: 4/20/90 FIELD INFORMATION ___

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
14:45 RB-9	20.0	0	6.4	0.5	1.6	End of Boring	B.T
			,			9	
	:						
						<u></u>	
·							
·							
,							

PROJECT 1610 ISRT PD 1
DATE: 4/23/90

___ FIELD INFORMATION _

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
10:00							1
Qu-23	20.5	, O	0.0	0.4	1.0	Background rendings	IN 1
10:30		_				90	1 ~
ow-23	20.6	0	0.0	0.0	00		In:
11:00	1				-		La. co
0W-33	20.6	0	0.0	0-0	0.0		ing
11:30	_		•	_	}		lin :
Ow-3-3	20.1	3%	0.0	0.3	0.0	(W 1
12:00		•	_	<u> </u>	1	FID notworking	1/10 50
0w-33	19.5	28	0.2	0-0			(In 9
13:00			_	<u>,</u> ,		C.O	la-1
QW-33	20.1	28	0.1	0.4	2-9	FID repaired	1
13:30		. 0.			ļ.,		/
Om-33	19.9	28	0.1	0.2	4.0	4	Mig
19:00		_	<u>,</u> .		Ì_	}	10.00
Ow-23	21-0	0	0.	0.2	3.2	<i>_</i>	In C
15:30]]	ln =
0w-33	20.9	0	0-(1.0	3.2	4	in y
16:00	_			1.5	2 -	į	(in a)
Ow-33	20.5		0.0	(.5	3.2	4	
16:45			2 2	1 11	0.0	10100	In in
ow-23	21.5	0	0.0	1-4	2.8	Endof Day	1
}			}			'	j
							
1		1		1			{
1		}.	ļ				

PROJECT |610 | ISRT PDI DATE: 4/24/90

DATE: 4/24/90 FIELD INFORMATION _____

LOCATION	7 02	COMBUSTIBLE GASES % LEL	H _s s ppm	PID ppm	FID ppm	COMMENTS	INITIALS
13:15							
Ow-23	20.4	0	0.0	0.0	0.0	Background reading	in 8
13:45						7	ling
au-23	19.8	0	0.4	0.0	2.0		MY
14:15	_						200 st
0ω-23	21.0		0.0	0.0	3.8	6	1000
15:00	ř 					~	100 -
OW-23	21.0	18	0-0	0.0	3.1		m g
15:45			_ ,				ling
16:30	21-5	28	0.1	0.0	2.5	 	
1	21.5	18	0.0	0.0	1.9	End of Pay	mig
Ow-23	61.5	16	0.0		1.7	Eng By Ray	-
			·			·	
			- -			~ `	
·	·						
						`	
				ļ			;
							
						}	
`					 		
		{					
		1	•				

ROUX ASSOCIATES, INC

PROJECT 1410 | ISRT PD |
DATE: 4/25/90 FIELD INFORMATION _____

LOCATION	7 O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FIO ppm	COMMENTS	INITIALS
7:45							
0w-23	21.2	1%	0-1	20	0.3		in 7
2:30		,	į				Cons
OW-23	21.1	18	0.0	1.6	08	1	Cons
9:30							lin 7
Ow-23	21.0	18	0.0	0.8	1.0		¥
10:00 0W-23	21-0	106	0.0	1.0	1.0	End of baring Oru 23 Background Madings	ln
15:30							1
Ow-24	21.0	O `	0.0	2.0	0-4	Background Redinger	in
16:00				1:			Van 2
16:30	21.0	18	0.0	4.9	0-4	1	m 8
3		. 0		1 -		10100	no
DW-24	21-0	16	0-0	4.0	1.3	End of Day	-
			·				
-	·						
						<u> </u>	
					-	 	
					1		
		*	. 1				

PROJECT | GO I ISRT PDI DATE: 4126/90

DATE: 4126/90 FIELD INFORMATION

LOCATION	≈ 0₂	COMBUSTIBLE GASES % LEL	H ₂ 5 ppm	PID ppm	FID ppm	COMMENTS	INITIALS
Ow-24							
2:00	20.9	1%	0.0	2.5	0.8	/	MIT
100-24	20.8	1%	0.0	1-6	0.1		MY
1:30 0w-24	20.6	176	1	1-6			, ,
9:00	20.8	0	0.0	1.9	2.7	/	la T
UW-24	000			. 2	2.7		/A "1
9:30	20.8	0	0.0	1.3	2-7	<i></i>	
10:30	20.7	0	0.0	1.2	2.6		Im 9
OW-24		0	2	1.1	4.0		In T
0W-24	20.6		0.2	1 - 8	1.0	 6 	
11:30	20.2	0	0.	1.4	4.0	L	M 9
OW-24	20.3	0	0.3	. /			my
12:00	0.3		0.3	1.6	3.2	 4	/ 1
0W-24 14:00	26.1	1%	0.1	0.0	2.3		ma
OW-24	200	1%	0 =	A - 5	4.8	`	/m 7
16:00' Ow-24	20.0	1 10	0.0	0:0	14.8	 	
16:45	19.5	0	0.0	0-0	4.4		MY
0W-24 17:15	19.5	0	0.1	0.0	3.2		in T

ROUX ASSOCIATES, INC

PROJECT 1610 | ISRT PD |
DATE: 4/27/10 _ FIELD INFORMATION Clear Sunny 80°

LOCATION	7 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
2:45	20.4	166	0.0	0.0	0.6	Background reading	129
8:30	21.4	0	0.1	00	0.8		Jun 7
9:00	21.2	0	0.2	0.0	1.7		un 1
9:30	21.5	0	0.3	0.0	2.4		1 1 T
10:00	214	0	0.2	0.0	2.7		(m 7
10:45	20.5	0	0.1	0.0	3.0		MY
12:00	208	0	0.3	0.0	21		in 7
13:00	20.5	0	0.3	0.0	6.8		149
13:45	20-4	0	o.2	0.0	1.5		M'7
14:20	21.1	0	0.3	0.0	1.6		BT
15:00	20.7	1%	0.1	0.0	0.0		637
15 :45	21.0	1%	0.1	0.0	0.0	Microtip Critically	B7
18:15	20.4	0	0.1	0.0		FID 1310W Endof Day	07
1 1	6 6		1 1	i f		1 4 4 /1 1	

ROUX ASSOCIATES, INC PROJECT /6/6/ ISRT PD!

FIELD INFORMATION Raining Overcast 48°

LOCATION	7 0 ₂	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
9:00	20.1	1%	0.0	0.0	0.0		of
9:45	20-4	160	0.0	14.0	0.0		HH
10:30	20.4	10/0	0-0	18.2	0.0		11/1
11:15						Exchange Microtip (PID) for OVM (PID)	71/1
13:15	20.1	1%	0.0	0.0	0.0		7/1/
13:20	20.2	1%	0.0	0.0	0-0		11/1
B: 40	20.3	2%	0.0	0.1	0.0		1/1/
14:10	20.2	2%	0.0	0.0			1/1/
14:40	26.3	2%	0.0	6.0	0.0		1/1/
15:10	20.3	2%	0.0	0.0	0.0		1/1/
15:50	20.2	2%	0.0	6.0	0.0		11.
							1

ROUX ASSOCIATES, INC

PROJECT (6 (0) ISRT PD1
DATE: 5/1/90 __ FIELD INFORMATION __

LOCATION	7 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
0W-25	20-7	0	1.7	00	0-0	Background reading	1/11
13:50	20.6	0	1.6	0.0	0.0		1/11
14:10	205	0	1.4	0-0	0.9		1/1/
			•	·		·	
•	·						
	·						
-							

ROUX ASSOCIATES, INC
PROJECT 16 (0) ISRT PP (
DATE: 52/90

DATE: 52/92 FIELD INFORMATION _____

LOCATION	7 02	COMBUSTIBLE CASES % LEL	H _z S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
S:30 Ow-29	21.0	0	0.5	0.0	0-0	Buckgroundrawding	7/1/
9:∞	20.8	0	0.5	0-0	1-4		1/1/
9:30	20-2	0	0.6	0-0	2.1		HH
10:50	20.8	O	0-6	0.0	2-2		11/1
1030 .	20.8	0	0-6	0-0	3-2		HA
11:00	20-7	0	0-6	0.0	40		1/1/
11:30	20.7	Q	0-7	0.0	5.2		1/1/
12:50	20.4	0	07	0-0	4.8		UM
13:30 .	20.7	1%	0.6	0.0	2.0	·	1/4/
14:00	206	1.%	5.6	0.0	1.8		HH.
				,			
,							

ROUX ASSOCIATES, INC
PROJECT 16101 ISRT PD 1
DATE: 513190 FIELD INFORMATION SURRY Clear 66°

	r			•		,	
LOCATION	≭ 02	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
¥:45	-1-7	0			1.0	Q 10 1	4/4/
Qu-27	21-7	 	00	0-0	1.0	Brokgmand Randing	10/10
9:00 00-27 9:30	.21.1	1%	0-2	0.0	1.0		6/6
9:30 0w-27	20-9.	1%	0-2	0.0	0.8		1/1
10:30 0w-27	20-0	0	0-3	0-1	0.0		BT
11200	20.0	 	U.S.				2-1
0~27	20.6	0	0.3	0.0	3-2	gas bubbles in groundwater	BT
12:05 OW-27	20.6	0	0.5	0-0	2-6		BT.
12:35							BT
OW-27	20-6	0	6.3	0.0	0.0	· .	$\mathcal{P}($
13:00 Ow-27	20.5	0	0.2	0.1	0.0		BT
13:45							07
Ow-27	20.2	0	0.2	0.1	0.0	<u> </u>	BT
16:∞ Ow-27	20.2	O	1.9	.6.0		ON A Battery exhausted	1/1/.
16:30 CW-27	21.1	1%	1.1	0.0			44
17:00							
Ow-27	21-1	1%	0.9	0-0		Endof Day	1/2/-
, ,	í í	1 1	1 1			f a 5 a	

ROUX ASSOCIATES, INC
PROJECT /6/01/ ISRT PDI
DATE: 5-7-90

___ FIELD INFORMATION Cloudy, sprinkles

LOCATION	7 02	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PIO ppm	FID ppm	COMMENTS	INITIALS
8:30	21.0			MICROTIA		Hartick #318	4/1
OW-30	20.9	0	0.5	8.6	0.0	Backgrained Load	eg/V/
8:45	1 40 4			1 , ~			1/4/
OW -30	20.6	0	0.5	1.5			1011
9:05 0w:30				1.9		PID Background.	46-
9:15 0W-30	20.6	/	6.5	6.0			41/
10:15 ·	21.0	0	0.6	0.0			6/1.
10:30 OW:30	20.6	0	0.6	0.0		Sux Greaking Herrugh. Pit Barg	N.H.
11:00 OW:30	19.9	0	0.5	0.0		J. S. C. T. T. S. K. K. C. G.	HH.
11:30 0W:30	20.7	0	6.5	0.0	•		世
12:00 ·	20.2	0	1.3	0.0			tH.
12:30 0W-30	20.8	0.	0.0	0.0			6/1.
13:15 0W-30	21.9	0	0.0	0.0			0%
13:45 OW:30	21.0	0	0.1	0.0			00
14:15 CW:30	26.7	0	03	0.0		•	71

ROUX ASSOCIATES, INC

PROJECT /6/0/9 ISRT P.D.T.

DATE: 5-7-90 CONT FIELD INFORMATION ...

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
15:15 OW:30	21.0	1	0.0	2.5			NH
15:50 0w:30	21.0	/	0.0	0.0		·	dH
16:36 0w:30						adod Mark	1/1/
7740.30						xdof lays	
	,						
							-
				· .			
·				•			
				<u> </u>			
		```					`
·							
						· · · · · · · · · · · · · · · · · · ·	+

PROJECT 16/014 ISRT PDZ
DATE: 5-8-90 ____ FIELD INFORMATION Cloudy.

LOCATION	π o ₂	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
8:30 AW-33B	20.1	1	0,1	3.0	0.0	Dackground Leading	4/1/.
9:10 0W-33B	20.4	,	0.0	1.9	0.0	KRAILCO - JA	1/4/
9:50 0W-33B	,	,	0.1		0.0		11/1/
10:30 0W-33B	İ	0	0.1	0.8	0.0	10°9-10'5 copper break	1/4/
11 00 0W-33B	ł	0	0.3	0.0	0.0		4/4
11:30 CW-33B		1	0.4	0.0HH	0.0		1/8/
12:00 0W-33B	19.7	0	0.4	0.0	0-0	12:15-1245 LUNCH.	00
12:50 0W-33B	19.7	/	0.4	0.0	0.0		1/b.
13:45 ·	19.9	1	0.3	0.8	0.0		MH
14:15 OW-33B	19.9	,	0.3	0.4	0.2		HH.
14:55 OW-33B		/	0:1	1.6	0.1		1/H,
15:35 OW:33B	20.3	/	0.3	0.0	0.0		00
1 1/2 15	10 9	0	0.2	0.0	0.0		W.
						End of Day	NH.

ROUX ASSOCIATES, INC
PROJECT /6/0/ ISRT PID
DATE: 5-9-90

	1	1	, 00	1	1	1	, i
LOCATION	<b>x</b> 0 ₂	COMBUSTIBLE GASES X LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
8:15				MICROTIP			.1
OW-33P	21.1	0	0.2	50	0.2	Dackground Leadin	2 KM
8:30	1						1/4/
OW-334	21.1	0	0-2	2.9	0.2		10/1
9:10 OW-33B	21.0	6	0.3	1.8	0.6	·	1/1/.
9840				·			1/1/
OW-33B	20.9	0	0.4	0.0	0.0	Weather Clearing	WH
10:22. OW-33B	7 7	0	0.5		0.6		4/4/
	00.7			0.0	<u> </u>		C //-
10:50 0W:33B	20.6	0	0.7	0.0	1.0		MA
11:45					_		1/11
OW-33B	20.8	0	0.9	0.0	0.8		To The
13:45 0W-33B	20.2	,	1.0	0.0	0.4		HH.
13:30							1/1/
OW-333	20.6		0.8	0.0	0.2		7/7
14:30		,			<b>A A</b>	·	1/1/
OW-33B	20.8	<u>/</u>	0.7	0.0	0.2		1/2
14:59 OW-33B	21.0	/	0.7	0.0	0-2	ļ	66.
15:50							1/4/
OW-33B	26.9		0.6	0.0	0.0		1/4.
16:40 0W-33B	21.0	0	0.5	0.0	0.0		OH!
						E Dal Para	1/1/
· • •	<b>.</b> .	<b>f</b>	<b>F</b>			Endoy Day	

PROJECT 16 1017 ISRT-POT DATE: 5-10-90

DATE: 5-10-90 FIELD INFORMATION RAINY, 650F, HUMID

LOCATION	7 02	COMBUSTIBLE CASES % LEL	H ₂ S ppm	P1D ppm	FID ppm	COMMENTS	INITIALS
8:30 OW-30	21.0	2	0.0	MICKOTIP 9.3	0.4	Bockgraid Leading	1/1/
9:10 0w-30	21.6	2	0.0	5.6	0.4		1/1/.
10:00 0W-30	21,6	2	0.0	0.0	0.4	PARTLY CLOUDY, WS'F, SOME SUN. PID BACKGROUND	HH.
10:30 (W-30	21.1	2	0.2	0.0	0.6	·	6/1
11:00 · 0W-30	21.0	1	0.2	0.0	0.4		HH.
11:30 OW:30	21.0	1	0.0	00	0.2		1/11
12:00 0W-30	20.8	6	6.0	0.0	0.4		UK.
13:15 0W:30	21.0	1	0.0	0.0	0.4.		6/16
14:10 · 0w-30	20.8	1	0.0	0.0	0.6	·	60.
15.00 6W-30	21.0	2	0.0	0.0			66.
16:30 GW:30	21.1	1	0.0	0.0	0.2		66.
17:20 0W-30	21.1	0	0.0	0.0	0-2	R.	M.
17:45 0W-30		·				Exides Dach	H.H.
						0	

PROJECT 10 TO SERT 101

DATE: 2/11/90 FIELD INFORMATION _____

LOCATION	7 O2	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	F10 ppm	COMMENTS	INITIALS
8:45	2/ 0		4.0			Background Leadings	1/4/
FE-WO	21.0	0	0.0		0.2	Leadings	10/1/
9:20 OW-27	20.8		0.0	0.0			MA
10:00 0W-27	26.8	/	0.0	0.0	0.0		7/X1.
10:40	700		•				1/1/
OW-27	21.0	0	0.0	0.0	0.4	,	UK.
11:05 OW-27	20.5	0	0.0	0.0	0.6		dh
11:25 OW-27	26.5	0	0.0	0.0	0.6		8H
11:30 OW-30A		0	0.0	0.0		Background Leadings	66
11:35 OW-30A	26.1	0	0.0	0.0			HH.
12:00 OW-30A	26.3		0.0	0.0			6%.
12:3/2	20.9	1	0.0	0.0	0-2		116.
13:17 OW-27	20.8		0.0	0-0			1/16
·				_		Exclos Day.	
						. 0	
		£ .			-		

ROUX ASSOCIATES, INC

PROJECT 16 101 | ISRT PDI.

DATE: 5/14 | 90 | FIELD INFORMATION PARTLY CLOUDY CLEARING BUT STILL

WET & HUMID.

LOCATION	x 02	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FIO ppm	COMMENTS	INITIALS
8:15 OW-26B	20,9	/	0.0	MICROTIP 6.7	0.2	BACKGROUND READINGS GASTELH #305	HH
8:40 OW-26B		/	0.1	6.2	0.2	·	116.
9:00 OW-26B	i	/	0.1	0.0	0.2		dH
10:00 0W-26B	ļ.	/	0.0	0.0	0.4		1/1/
10:30 OW-26B	1	1	0.0	0.0	6.4		1/1.
11:00 OW-26B	}	/	0.0	0.0	0.5		0/1
ا منصبا	}	0	0.2	0.0	0.5		HH.
12:00 0W-260 14:20 0W-263	26.4		0.4	0.0	0.2		4/6/
14:50 OW-26B	•	0	0.2	0.0	0.7		7/7/
15:26 OW-26B		, ,	· · · · · · · · · · · · · · · · · · ·			AUGER REFUSAL FOR OW-26 B. GROUTING. END OF DAY.	HH.
		·				·	
			· · · · · · · · · · · · · · · · · · ·				

PROJECT POSSON ASST CONT.

_ FIELD INFORMATION ____ ひいってそら

COMBUSTIBLE TLV GASES % LEL H₂S ppm PID ppm LOCATION % O, -FID ppm COMMENTS INITIALS 07:50 ٥ 21.0 0.0 BI 00 68:20 20.8 BI 0 0.0 0.0 0.0 0905 20.6 0 4 BI 0 0.0 D. 0 09:45 20.7 0.6 BT Ò ð. 0 0.0 10:15 20.3 BT 0.3 D 0.0 0.0 Bī 10:50 ٥.٥ 2.8 0 0.1 0 0.0 BT 11:13 21.1 (O) 0 ٥.3 0 BT 12:25 20.8 O 0.1 0.0 0.0 BT 20.5 0, 3 0.0 13:00 0 O- 0 BT ( 1.0 14:00 20.7 0.0 0.0 BT 14:30 0.1 0.0 22.6 0. 📞 BT 15:50 8.0 20.7 D. 0 0.0 (5:30 2_ BT 0.1 20.8 0.0 0.0 and of coan # 2 D# 1371 # ^-O# (/2 21. 3

34

#### AMBIENT AIR QUALITY FORM

ROUX ASSOCIATES INC PROJECT AGEORY: ISRT OFF

DATE: ______ FIELD INFORMATION _____

LOCATION	7 O2	COMBUSTIBLE GASES % LEL	H _z S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
0 9.50	21.5	l	0.0	٥.٥			BT
10:00	21. 3	٥	0.0	0.0			BT
10:30	21.3	0	0. 0	0. 0			BT
11:50	21.0	0	0.1	0.0			BT
11 = 3 =	21.0	ဗ	6.0	٥٥			BT
12:00	21-0	હ	6-0	0.0			BT
(2:30	21.1	. 0	<i>0.</i> ©	0.0			BT
/3:00	2(.0	٥	0. 0	٥. ٥			BT
13:3.	20.7	1	0.0	0.0	_	End of day	BT
						( /	
·							
			:				
	· · · · · · · · · · · · · · · · · · ·						·

ROUX ASSOCIATES INC PAT

DATE: SIG 90 FIELD INFORMATION OW - 23

COMBUSTIBLE H_aS ppm 7 O2 GASES % LEL PID pom LOCATION FID ppm COMMENTS INITIALS 0 9.00 O 21.0 2.9 O. 0 ٥. لـ 09:55 O 0.9 0. 5 21.1 0.1 10:10 21.1 O 0.0 0.0 0. 9 10:25 21.1 0.1 0.9 0 0.0 10.45 1.0 20.9 0_ 2 0. O O (M FED) : 10 Ó 0.2 1. ( 21.0 0.0 11:22 1.1 24.8 0. 2 D. 0 Ò 11:45 20.9 02 1.1 0 0.0 12:10 1.1 20.7 0, 2 O 0.0 13: N 0.8 21.0 0.0 0.2 (3:30 0.9 20.9 0.3 0.0 14:00 21.0 0.7 0, 0 Ó 0_/ 21.1 0.6 6.6 0 16:20 0.1 21.1 0 17.91 # T. 68

PROJECT HOSEON ISRT OFF

FIELD INFORMATION OW-25

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	<b>TEV</b> FID-ppm	COMMENTS	INITIALS
14:30	21.4	3	0.2	٥. ي	8.0		BT
(5:00	21.4	2	0.0	<i>ბ</i> -0	0.0		BT
(5=30	21.4	3	0.0	Ø 0	O- 0	End of day	BT
·						·	
				-			
· · · · · · · · · · · · · · · · · · ·							
[ <u></u> ]							<u>'</u>

PROJECT ADSCORP ISRT OFF

FIELD INFORMATION

dw-23

LOCATION	% O2	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
07:55	20.9	6	Ø. o	3.1	0.2	Background /Raming	1/1/
08:35	21.0	0	0.0	3, 7	0-2		11/1
09:05	21.0	0	0.0	3.4	0-(		HH
09:36	21.0	O	6.6	5. 7	<b>5.</b> (		HH
10 - 50	21.0	0	0.1	5.0	0.1		HH
11:00	21.0	0	٥.٥	3. 8	0.1		1/1/
11:25	2o F	0	0.1	3.6	0.7		HH
12-50	-20.9	- n	1.0	3. 6	0.1		1/1/
13:00	20.6	0	0.0	14.6	مع		1/1/
13:40	20.8	1	<b>0.</b> 0	11.6	0.1		HH
14:10	20.9	(	<b>ბ</b> . დ	7.2	٥. ٦		111.
 	1 1	f	I E	e e			 

PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSTRUCT ADSSORP ISRT OFFE PROJECT ADSSORP ISRT OFFE PROJECT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT ADSTRUCT

			•	-			
LOCATION	7 O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
0710	21.2	2	0. 3	0. 0	0. 0	book ground readings	MH.
09:30	21.1	2	0.0	٥.٥			NET
11:15	21.0	2	0.0	O- Q			VN-T
11:45	21.1	2	٥٠٥	٥. ٥			MT
12:15	21.0	(	٥.١	o. c		End of day	MT
						7	
· ·							
				· · · · · · · · · · · · · · · · · · ·			
`							}

PROJECT POSSON ISRT OFFE

FIELD INFORMATION 123-10 + 23-11

<u> </u>	f 1	,		•		•	•
LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
6930	20.9	٥	D-1	0.0	0.9	Bockground	HH
(0>10	20-8	6	0.1	0.2	1.0	U	44
eg-4	20.9	O	p.1	0.6	1-5		7/4
11:23	20.8	٥	0. /	D, 0	1.3		111
12:00	20.3	0	O. 1	0. 0	1. 6		HH.
	-						
	£ 4	: 1	f f	f i			

PROJECT #055000, ISRT GENT

_ FIELD INFORMATION _ &U - 25 B

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	TW ppm	COMMENTS	INITIALS
0830	21.4	0	٥.٥	ð. o	გ. ე	Background readings	BI
09:00	21.2	0	0.0	0.0	0.0	Background readings	37
09.35	21.0	0		<b>0</b> , 0	0.0		37
10:15					elud .	Mone to 25A	BT
11:00	20.7	0	0.1	٥٠٥	0.0		BI
11:35	20.6	0	0.1	0.0	0.0	End of day	BT
:							
	· · · · · · · · · · · · · · · · · · ·						

PROJECT 161014 ISRTPD (DATE: 5/21/90

FIELD INFORMATION

Zain, cold

Time LOCATION	7 O2	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
0845	21.2	2.0	0.0	0.0	1.2	Damp air	CA F
0915/RB-12	21.4	2.0	. 0-0	0.0	0.4	Para - Steedily /	ME
0445/20-13	21.7	3.0	0-0	<b>0</b> . 0	0.3		Visit of
1015/20-13	21.6	3. 0	Ð. D	1.2	/- D	Elowated OVA (F. D) readings to get needle out of nepartice	John of
1315/ 185-14	21.5	2.0	0. D	2_ 0	0.5		Jung
1350/RB-14	21.5	3. o	0.0	2-8	0.6		1 wor
1415/RB-15	21.6	2.0	Ø+ 0	2-4	/. 0	·	lin of
1445/RB-15	21.6	3. 0	0.0	3.6	1.0 .	End of day	in T
	•						
							,
		·				•	
2 2		* *					

__ FIELD INFORMATION _

OW-25

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	TW <del>-FIB</del> ppm	COMMENTS	INITIALS
08:3.	20.8	0	0-1	ð. ş	O. c	Background	25
09:00	20.7	0	0.1	0.0	۵- ٥		BT
09:30	20. B	O	0. (	Ŋ- 0	0.0		BT
10:50	20-5	0	0.1	au	0.0		DT
10:40	20.4	O	0. 2	6.0	0.0		057
12:30		O	0.1	0,0	0.0		BT
13:00	21.0	O	0. (	0-0	0.0		BT
13-7.	20.5	0	ο. υ	0.0	0.0		BT
14:10	20.5	Į.	0.7	0.8	٥. ن	!	BT
14:40	20.6	,	0- (	0.0	0.0		BI
15:20	20.5	,	0- (	0. 4	0. 0		BT
(6:00	20.5	1	0. (	٥. ن	0. 0		37
16:35	20.7	/	0.(	0, 0	0.0		37
17:05	20.7	1	a. 1	ల. ు	ک ن	End of day	BT

ROUX ASSOCIATES, INC
PROJECT (61017 ISRT (D)
DATE: x/22/90

FIELD INFORMATION Damp cold

Tum./ LOCATION	7 02	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	_ INITIALS
0815/23-16	21-1	2.0	0.0	0.0	1.6		In of
0900/RB-16	21.0	2.0	D- 0	ರಿ. ೮	1.6		En 8
0945/28-17	21.4	2.0	0.0	0.0	1.8		lu 's
1015/83-17	21.(	1.0	0.0	0-0	2-4		lon "
1230 /	21.0	1.0	0-0	1.3	1-3		(mº
30c/RB-18	20.8	1.0	0.0	0.5	2, 0		(m
33. /23-18	21.0	1.0	<b>წ</b> . 0	0.0	2.5	·	VM 9
10 /RB-18	21.0	1.0	6-0	6-0	2.5		(m
130/63-18	21.0	1.0	ð. °	0-0	2.5		IM?
500 / R3-18.	20.9	1.0	0.0	0.0	2.4	Brottory low on PID. only using and every 1/2 how	in
530/23-18	21.0	(. 0	0.0	0-0	2.2		M 91
RB18	21.0	1. 0	0.0	0-0	2. 2		(pr 8)
30/03/18	21.0	(. 0	0-0	0-0	2, 0	End of day	1. PM
i	i 1	£ £		* •			

ROUX ASSOCIATES INC POT

DATE: \$ 23/90

FIELD INFORMATION _

ow - 25A + 26

	ı	1		1	- L	1	
LOCATION	7 0 ₂	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	すしく 中ID ppm	COMMENTS	INITIALS
08:00	21.0	(	0.0	<b>6.</b> 0	0. 0	Background	BT
08:35	21.2	2	0.0	o. s	0.0	V	OT
09:00	21.3	2	ბ. ს	0.0	8-0		BT_
09:3	21.4	2	ა. ი	D. 0	0.0	End of day	BT
			:				
					- <del> </del>		
	:		·				
				 			-
!	ļ			ı			1

ROUX ASSOCIATES, INC.

ATE: 5/23/9. FIELD INFORMATION Damp, cola

<u>'</u>	,		,				
LOCATION	% 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
0900/23-19		6.0	0.7	0.0			Jan 9
0930/RB-19	20-5	0.0	· 0.1	0.0			las eq
1030 /23-21	20.3	ტ. ს	0.0	0-0			lung
1115 / RB-20	20.4	0-0	O. 0	0.0			2 mcg
1245 . /RB-21	20.5	<b>0</b> . o	٥, ٥	<i>6-</i> O			Zarg
1370/02-21	20.4	0.0	0.1	0.0			(m°
1400/	2o.6	0-0	ا ۵	۵. ٥.			(mg
1430/23-21	20.5	0.0	0-1	0-0		Sad of day	Lun 9
-							
						•	
	<b>i</b> i	8 6	£ £				

PROJECT #05500 ISRT OFF DATE: ___

_ FIELD INFORMATION _____OW - 26

LOCATION	z 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
69:15	20.3	0	0-5	0.0	0.0		BT
01.45	24-5	1	0.1	0.0	0.0		Br
10:15	20-7	1	0.1	0 - 0	0.4		BT
13-45	20.7	1	0.1	0. 0	0.6		BT
11:15	20.6	0	0.1	0,0	1.0		QT.
12:50	20.5	0	0.1	٥. ٥	1.2		RT
12:30	20.2	,	02	0.0	1-0		25
/ 3:50	20.6	l	0-1	0.0	0,8	Cont a day	5
, , , , , ,						End of day	15/-
				<u> </u>			
· · · · · · · · · · · · · · · · · · ·							
<u>.</u>							

PROJECT POSSON ISRT OFF

ATE: 612/190 FIELD INFORMATION _____

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
ATB-19	20.2	- 0	0.3	2 2		0 1 10 1	BT
11:15 ATB-19	20.2	<u> </u>		0.0		Background Reading	2/
11:50_	26-2	0 .	o-3	0.0			BT
ATB-19		19-8	6.3				2-
12:15 177B-19	1.9-8	14-15	0.2	6.0			BT
12:45	20.2	0	0.3	0.0			BT
ATB-19		0	0.4				B-
13:15 ATB-19	20.1	<u> </u>	0.4	0.0			13(
13:45 ATB-19	200	0	0.3	0-0			B7
14:15	19.9	0	0.3	6-0			BT
ATB-19	.19_8	^	0-3				BT
15:00 ATB-19	14-8	0	0-3	0-0			
15:30	20.0	0	0.4	6.0			BT
ATB-19	212		<b>.</b> .	6.0			BT
16:00 ATB-19	21-3		0-6	6-0			1.)(
16:30	21-2	0	0-0	0.0			BT
ATB-19 17:15	21.3	0	0-1	0.0		EndolDay	BT
7 (	( (	, ,		<b>.</b>	2 8		•

PROJECT PROSECT PROJECT FIELD INFORMATION _____

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
ATB-19	20.6	.0	٥-٥	0.0		Background reading	BT
ATB-19 2:30	19.9	.0	0.1	0-0		- Cas agracije i cas ing	Bi
ATB-19 9:00	20-6	0	.0-1	0.0			Br
ATB-20	21-0	Ð	0-0	0.0		B. V. La	Bí
10:40 ATB-20	20.9			<del> </del>		Background reading	Bí
11:00 ATB-20	20.7	©·	0-0	0-0			BT
11:30 ATB-20	20-9	0	0.1	D-O			BT
2:00   ATB-20			0.1	0.0			BT
13:00 ATB-20	210	0	0.1	0.0			BT
13:35 ATB-20	212	0		0-0			BT
14:00 ATB-20	20-6	0	6.3	0.0			
14:30 ATB-20	206	-2	0.0	0.8			BT
15:00 ATB-20	21.0	2	0-1	0.0			BT_
16.00 ATB-20	21.1		0-1	0.0		0 1 00	BT
16:30	20.8	2	0.0	00		EndofPay	BT

PROJECT POSEON ISRT OFF

__ FIELD INFORMATION ____

ALOCATION ATB-2D	% o ₂	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
8:20	& 21.O	O	0.1	0.0		Background reading	Br
ATB-20 8:45	210	ඵ	0.1	0.0		LALS GIVE HOLD TO ANY	BT
ATB-20 9:15	20.9	0	0.0	0.0			BT
ATB-21	20-9	0	0.0	0.0			BT
ATB-21	20-9	O	0-(	_			BT
12.15	21-0	Ò	0.1	0-0			BT
12:15 12:45	20.7	0	0-2	0.0			B7
ATB-21 13:20	20-4	0	0.0	0-0			BT
ATB-4 3:45	20-4	j	6.0	n 0		Fort of Day	BT
						7	
ŧ I	( (	1 1	F 4	E. L	<b>a.</b> <i>t</i>		

PROJECT FORESON: ISRT OFF

ATE: 7/2/90 FIELD INFORMATION _____

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
ATB-21						0 . 10 .	11
7:50	21-0	0	0.0	6.0	<u> </u>	Background Reading	<i>B</i> T
ATB-21	21.1	$\Diamond$					BT
18:25 ATB-21	<u></u>	<u> </u>	0-1	0-0	<del></del>		Ω'
<u> </u>	21.1	0	0-1	0.0			BT
ATB-21							2-
9:25	21.0	_0	0-1	0.0	-		BT
ATB-21	21.0	0	0_) '	0.0			BT
10:00 ATB-21	21.0		<u> </u>				
10:30	21-0	-5	0.2	0-0		EndofDay	BT
			<u> </u>				
1							
·	•						
		<u> </u>					
			:				
·			ş				
		·			j		
				<u> </u>			,

ROUX ASSOCIATES, INC

PROJECT 9/18/90

___ FIELD INFORMATION _____

	,	_	_			•	
LOCATION	7 O2	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
0w-34 9:35	21-0	0	0.0	0,0	0	Backgroundreading	BT
೦w-34 10:05	20.5	ð_	0-5	0,0	0	Hit bedrock move borehole	BT
0w-34 10:50	21.2	0	0.0	0.0	0	Background raiding	BT
0w-34 11:10	20.6	0	0.0	0-0	0		BT
0w-34 11:35	20-4	0	D-0	0.0	0		BT
ew-34	20-5	1	8.0	0.0	0		BT
0w-34 14:00	20-4	0	۵-0	D•O	0		BT
Dω-34	20.8		0-0	0.0	0		BT
			`				
£ .	· · ·		<b>E E</b>	<b>5</b> • •	1		ŧ

Measured in field by Brian The

LOCATION	7 O2	COMBUSTIBLE GASES % LEL	H _p S ppm	PIO ppm	FID ppm	by Marken COMMENTS	Suite
Background						COMMENTS	
8:30	21.3	/	0.1	5,5	0		BT
Background 9:00	21.3	/	0.1	3.2	0		BT
Background 9:30	21.2	0	0	0.0	0	,	BT
0W-35,37 13:30	21.2	/	0	0.0	0	Setupat OW-35	BT
0W-38 14:00	21.0	0	0.1	0.0	0		BT
010-37 14:30	20.7	O	1.2	0	0		BT
0ω·37 15:00	20.3	0	0.6	0	2		BT
0W-37 15:30	20.8	0	0.5	0	0 .		BT
0w.37	21.0	/	10.4 md.	0	0		BT
0W-37 16:30	21.2	/	0.2	0			BT
0W-37 17:00	21.0	/	0.3	0	0		BT
	· .						
						·	
<u> </u>	L		<u> </u>	<u> </u>	<u> </u>		

* Measured in field by Brian Thomas; transcribed from field notes by Martha Smith

PROJECT #16/01 - GOLDER ASSOC., Webin, MA

DATE: 9-21-90 FIELD INFORMATION 0W-37

LOCATION	* o ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	* INITIALS
Background 9:05	21.0	0	O	0.0	0	Background	BT
OW-37				<del> </del>			
9:35	20.5	0	1.7	0.0	0		BT
0W-37 10:05	203	0	2.1	0	0	1.	BT
0ω-37 11:00	20.5	0	2.1	0.0	0		BT
0W-37 11:35	20.5	0	2.2	0	0		BT
0W-37 13:20	20.5	0	0.5	0.0	0		BT
0W-37 13:50	20.8	0	0.4	0.0	0		BT
0W-37 14:20	20.0	0	0.5	0.0	0		BT
						•	

ROUX ASSOCIATES. INC. PROJECT #16101 - GOLDER ASSOC., Wabin, MA DATE

* Measured in field by Brian Thomas; transcriped from field notes by Martha Smith

~~~			•	_
me.	9-26-90	SIEI D	INFORMATION	0ω-39
C:	<u> </u>	FIELD	HAL OKWALION	

¥ 0.	COMBUSTIBLE CASES Z LEI	H. S. pom	PID ppm	FIO anm	COMMENTS	INITIALS
~		Z - VV		, , , , , , , , , , , , , , , , , , ,	VOMINCH 13	MATTER
20.0	0	1.1	4.9	0.0		BT
20.0	0	1.0	0.0	0		BT
					FID peaked at 10.0 ppm	0-
20.1	0	1.1	0.0	10.0		BT
					Measured > 3100 ppm in borehole at 5.0; LEL in borehole measured 4370	BT
20.7	0	0.1	0	0.0		BT
						0-
20.7	0	0.1	0	0.0		BT
		_				0-
20.8	0	0.2	0.0	0		BT
21.1	/ 7.	0.1	0	0.0		BT
20.7	/	0.2	0.0		FID ran out of hydrogen	BT
· · · · · · · · · · · · · · · · · · ·						
	20.0 20.1 20.7 20.7 20.8	20.0 0 20.0 0 20.1 0 20.7 0 20.7 0 20.8 0 21.1 /7.	20.0 0 1.1  20.0 0 1.0  20.1 0 1.1  20.7 0 0.1  20.7 0 0.1  20.8 0 0.2  21.1 17. 0.1	# 0, GASES # LEL H, 5 ppm PID ppm  20.0	X 02     GASES X LEL     H2 S ppm     PID ppm     FID ppm       20.0     0     1.1     4.9     0.0       20.0     0     1.0     0.0     0       20.1     0     1.1     0.0     10.0       20.7     0     0.1     0     0.0       20.7     0     0.1     0     0.0       20.8     0     0.2     0.0     0       21.1     17.     0.1     0     0.0	# 02 CASES # LEL H25 ppm PTO ppm FID ppm COMMENTS  20.0 0 1.1 4.9 0.0  20.0 0 1.0 0.0 0  ## 10 ppm COMMENTS  20.0 0 1.1 0.0 0.0  ## 10 ppm COMMENTS  20.0 0 0.0 0  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ## 10 ppm COMMENTS  ##

* Measured in field by Brian Thomas; transcribed from field notes by Martha Smith

ROUX ASSOCIATES, INC

PROJECT # 16101 - Golden Assoc., Woburn, MA

9-27-90

FIELD INFORMATION _

OW-39

LOCATION	x 02	COMBUSTIBLE CASES % LEL	H _g S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
Background 8:00	21.6	170	0.0	0	0.0	10ppm in boukele with FID.	BT
οω-39 8:30	21.3	/	0.0	1.5	0	8 ppm in Brechle with	BT
0ω-39 9:00	21.4	/	0.0	2.8	0.0		BT
οω-31 /0:30	21.2	0	0.0	0.0	0		BT
0ω-39 11:00	21.3	/	0.1	0	0		BT
0w-39 12:00	20.8	0	0.4	0	0		BT
0W-39 12:20	20.5	0	0.2	0	0	,	ВТ
0W.39 13:00	20.5	0	0.2	0	0 .		BT
ow-39 13:30	20.7	0	0.2	0.0	0		BT
0W-39 14:00	20.7	0	0.5	0	0		BT
0W-39 14:30	20.6	0	0.5	0	0		BT
0W-37 15:05	20.8	/	0.4	0	0		ВТ
οω-39 15: 40	21.2	/	0.3	0	0	`	BT

* Measured in field by Brian Thomas; transcribed from field notes by Martha Smith

ROUX ASSOCIATES, INC.

PROJECT*/6/01 - GOLDER ASSOC., Webush MA

DATE: 1-28-90 FIELD INFORMATION _____

OW-40

LOCATION	% O ₂	COMBUSTIBLE CASES % LEL	H _s 5 ppm	PID ppm	FID ppm	COMMENTS	* INITIALS
OW-38 m.A	20.7	0	1.7	0.0	6	Background Reading	BT
0W-40 11:45	20.8	O	/· Z	0.0	0		BT
0W-40 12:15	20.7	1	1.0	0	0		BT
0w-40 12:45	20.8	0	1.0	0	0		BT
CW-40 13:15	21.0	0	0.5	0	0		BT
οω-40 13:45	21.3	0	0	0	0		BT
0W-40 14:30	20.8	0	0.6	0	0		BT
15:00	21.1	0	0,5	0	0	,	BT
0W-40 15,30	21.3	0	0.6	0	0.0		BT
		·					

* Measured in field by Brian Thomas; transcribed from field notes by playtha Smith

PROJECT # 16101 - Golden Assoc., Wabina, MA

DATE: 10-1-90 FIELD INFORMATION OW-40

LOCATION	% 0 ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	** INITIALS
OW-40				1		}	BT
10:00	21.0	0	0	0	0		07
OW-40							07
10:30	21.3	0	0.0	0.0	0.0	<u> </u>	BT
OW-40							Q-
11:00	21.1	0	0.1	0.0	0.0		BT
0W-40 11:30	20.8	0	0.0	0.0	0		BT
OW-40							
12:20	20.8	0	0.1	0.0	0		BT
OW-40							2-
13:00	20,4	0	0.1	0.0	0		BT
OW-40							Q.T
15:10	20,2	0	0,2	0.0	0.0		BT
OW-40					0.8		BT
15:40	20.2	0	0, 2	0.0	0.0		0/
16:10	20.4	0	0.1	0	0		BT
			i				
				-			
	s			<b>F</b> •			

* Measured in field by Harry Gregory; thanscribed from field notes by Martha Smith

ROUX ASSOCIATES. INC PROJECT # 16101 - Guiden Assoc., Wobern MA

DATE: 10-2-90

. FIELD INFORMATION __

OW-38

LOCATION	7 O2	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	* INITIALS
OW-38	20.8	0	0		0		46
8:45 OW-38	20.0		0	0.2			
9:15	20.6	0	0	0.6	0		H6
OW-38		O	Δ	2.0			H6
9:45 ow-38	21.1	0	0	0.9	0	<u></u>	
10:15	20.1	0	0.1	1.2	0		HG.
OW-38							1/2
10:45	20.5	0	0.0	1.1	0		H6
OW-38					1		HG
11:15	20,7	/	0.1	1.1	0	<u> </u>	110
OW-38 11:45	20.8	,	0.1	1.0	0		HG
OW-38		<u> </u>					
12:15	21.0	0	0.1	1.2	0		46
0W-38 13:15	21.0	0	0.0	1.1	0		H6
OW-38				<del> </del>			
13:45	20.8	0	0.0	1.5	0		46
OW-38-				1.4			HG
14:26 md.	20.8	0	0.1	9	0		
0W-38 14:45	20.5	O	0.0	1.4	_		HG
OW-38		,					H6
15:15	20.7	/	0.0	1.1	0		77.0
OW-38 15:45	21.0	0	0.0	1.2	0		HG-

ROUX ASSOCIATES, INC
PROJECT # 16101 - Golden Assoc. Woburn MA
DATE: 10-2-90 FIELD INFORMATION

OW-38 ____ FIELD INFORMATION ___

LOCATION	% O2	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIAL
OW-38							111
16:15 OW-38	20.8		0.0	1.2	0		HG
	20 7		_	,,			HG
16:45	20.7	1 /	0	1.1	0		
<del></del>	<del> </del>	-			<del>-</del>	<del>-  </del>	
	1					- <del> </del>	
		1		<u> </u>			
<u></u>	ļ						
<u>-</u>	<u> </u>	_			i	-	
				•			<b>!</b>
<del></del>	<del> </del>			<u> </u>			
							ļ
·			······································	<u> </u>			

* measured in field by Harry Gregory; franscribed from field notes by Martha Smith

ROUX ASSOCIATES, INC

PROJECT #16101 - Golden Assoc., Weburn MA

DATE: 10-3-90 FIELD INFORMATION .

OW-38

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	* INITIALS
OW-38	1						11/6
08:15	21.0	0	0	0	0		HG
ow-38 8:45	21.Z	0	0	0	0		HG
ow-38	1 472	<del> </del>				<del> </del>	
9:15	21.4	0	0	0	0		HG.
OW-38							111
9:45	21,2	0	0	0	0		HG
OW-38			}				111
10:15	20.6	0	0	0	0		HG
OW-38		i			1	ł	HG
10:45	20.6	0	0	0	0		76
OW-38	20.7	0	0	0	0		HG
11:15 OW-38	100,7	1		1	1		
11:45 OW-38	21.0	0	0	0	0		HG
OW-38							110
12:15 OW-38	21.2	0	0	0	0		HG
1		-					46
13:00	21.2	0	0	0	0		MU
OW-38					_	1	11.
13.30	20.8	0	0	0	0		46
OW-38						}	46
14:00	20.8	0	0	0	0	<del></del>	
						-	
			1				-

* Mesured in field by Harry Gregory; transcribed from fixed notes by Martha Smith

ROUX ASSOCIATES, INC

PROJECT #16101 - Golden Assoc., Wobunn, MA

DATE: 10-4-90 FIELD INFORMATION OW-41

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
OW-41							
10:00	20.8	0	0.1	1.0	0		46
OW-41							
11:15	20.4	0	0	1.8	0	1	46
OW-41			ļ		ł		110
11:45	20.5	0	0	1.7	0		HG
OW-41					1		HG
12:15	20.4	0	0	0.6	0		77.0
0W-41	_		:				H6
12:45	20.3	0	0	0.8	0		AG
OW-41					}		1111
13:15	20.6	0	0	0.6	0		46
OW-41			1				
13:45	20.4	0	0	0.4	0		H6
OW-41							
14:15	20.7	0	0	2.7	0		H6
OW-41			j	1		Briting dead on PID	111-
14:45 0W-41	20.8	0	0		0		H6
							HG
15:15	20.8	0	0		0		110
·							
•	-		ļ	]			
	<u> </u>						
			1		1	·	
	1						
	ļ						
							<b>F</b> [

* Measured in field by Harry Gregory; transcribed from field notes by Morth

ROUX ASSOCIATES, INC

PROJECT# 16101 - Golden Assoc., Wobush, MA

DATE: 10-5-90 FIELD INFORMATION OW-42

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H _a S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
OW-42							
10:00	20.9	0	0.1	0	0		HG
OW-42		1					./.
10:30	20.9	0	0.0	0	0		HG
OW-42					_		HG
11:00	20.8	0	0	0	0		170
0 W-42							H6
11:30	20.1	0	0	0	0		1//0
	<u> </u>						
	<del>- </del>	<del>-  </del>			<del> </del>		
	<del> </del>						
<del></del>	<del></del>	· · · · · · · · · · · · · · · · · · ·					
			}				
·							
	i						-
<del></del>							1
					. ]		
			\				
							1
	<b>{</b>	1	}	Į.		1	1

* Measured in field by Heldi Miller; transcribed from field notes by Martha Smith

ROUX ASSOCIATES, INC.

PROJECT #16101 - Gulden Assoc., Weburn, MA

OW-42 DATE: 10-9-90 FIELD INFORMATION

LOCATION	% O ₂	COMBUSTIBLE CASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
OW-42				_			1/11
9:15	20,7	0	0.1	2.2	0.0		HM
9:15 0w-42 9:45 0w-42 10:15	20.7	Ó	0.1	15,2	0.1.		HM
OW-42							11.11
10:15	20.7	0	0.1	63	40		HM
			:				
					-		
		j					
					·		
					_	<u> </u>	
}			]				
	<u> </u>						
	-			<del> </del>			
	}						

* Measured in field by Heidi Miller; from scribed from field notes by Martha Smith

ROUX ASSOCIATES, INC

PROJECT #16101 - Golden Assoc., Woburn, MA

DATE: 10-10-90

__ FIELD INFORMATION .

OW-42

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FIO ppm	COMMENTS	INITIALS_
OW-42		_					11.01
1200	21.7	0	0.0	0			HM
OW-42	217						HM
1230 OW-42	21.7	0	0.0	0			
	21.7	0	0.0	0			HM
1300 OW-42	\						
13 45	21.7	0	0.0	0			HM
OW-42							1/40
1415	21.7	0	0	0			HM
	_	<u> </u>					
		<del></del>			<u> </u>	<u> </u>	
<u> </u>							
	_						
	<del> </del>				<del></del>	·	
		1				1	
						,	***************************************
	<u> </u>						
				1	1	1	Į

* Minsured in field by Herris Miller; franscribed from field notes by Martha Smith

ROUX ASSOCIATES, INC

PROJECT # 16102 - Golden Assoc., Wobern MA

DATE: 10-11-90 FIELD INFORMATION Pumping Well (Digital Property)

	. 1			. 0		-	
LOCATION	7 O2	COMBUSTIBLE GASES % LEL	H ₂ S ppm	PID ppm	FID ppm	COMMENTS	INITIALS
Primping Well	- 2					-	HM
Pumping Well	921.7	0	0	0			
0915	21.7	0	0	6			HM
Pumping Well 0945	21.7	0_	0	0			HM
Pumping Well	V 1 1						
1315	21.7	0	0	0			HM
Pumping Well 1345	21.7	0	0	0			HM
Pumping Well	21.7	0	0	0			HM
1415 Pumping Well							
1445	21.7	0	0	0_			HM
Pumping Well	21.7	0	0	0			HM
1515 Pumping Well							
1545	21.7	0	0	0			HM
				i			
1	·	¹ —=₹ —=-₹		Lee	<u> </u>		<u> </u>

* Measured in field by Hexli Miller; transcribed from field notes by Martha Smith

ROUX ASSOCIATES, INC.

PROJECT #16102, Golden Assoc. Wobmin, MA

Pumping Well (Digital Property) DATE: 10-12-90 FIELD INFORMATION _

LOCATION	% O ₂	COMBUSTIBLE GASES % LEL	H _g S ppm	PID ppm	FID ppm	COMMENTS	INITIALS		
Pumping Well				_			.///		
0806	20.7	0	0	0			HM		
Pumping Well 0830	20 7		0		} ·		HM		
0830	20.7	0	<i></i>	0	<u> </u>		- 17701		
Pumping Well 0908	20.7	0	0	0			HM		
fumping well	l								
0930 Pumping Well 1000	20.7	0	0	0		<u> </u>	HM		
Pumping Well							11.0		
1000	20.7	0	0	0			HM		
Pumping Well	1			_			1100		
1030	20.7	0	0	0			HM		
1030 Pumping Well 1100 Pumping Well	20.7	0	0	0		,	HM		
Promouna Well	20.7	<del></del>		1	<del></del>	<del></del>			
1130	20.7	0	0	0			HM		
1130 Pumping West							. / . /		
1200	L×0.7	0	0	0	1		HM		
Pumping Well							1/44		
Pumping Well 1230	20.7	0	0	0		<u> </u>	HM		
			1						
					<u> </u>		<del></del>		
			}						
	<del> </del>	1		1		<del>                                     </del>			
	:								
	}	_							

## 3.0 EAST HIDE PILE SETTLEMENT MONITORING

#### 3.1 Monitoring Objectives

The objective of the settlement monitoring at the East Hide Pile was "to assess the rate of settling, and to determine when equilibrium has been established" (Golder Associates, Topographic features indicating possible previous shallow surface sloughing of slopes were noted during the course of the PDI, particularly on the lower slopes of the East Hide Pile. No evidence of recent slope instability was apparent.

3-1

The monitoring system consists of 12 surface settlement markers which were installed on the East Hide Pile in May, 1990, at locations shown on Figure 3-1. Each settlement marker consists of a 5-foot long, 1-inch diameter smooth steel rod driven 4 feet into the ground, and spray-painted for visibility. Some of the locations are within areas of possible previous movement.

The elevations for each settlement marker were initially surveyed on May 18, 1990. After that, the markers were surveyed once per month. The last surveys were carried out in April, 1991.

#### 3.2 Monitoring Results

The results of the settlement monitoring at the East Hide Pile for one year (1990-1991) are presented in Table 3-1. The results show that small heave or settlement movements have been recorded (typically less than 0.03 feet). Graphs of the recorded settlement point elevation changes are given in Figures 3-2 through 3-13. Points SM-6, SM-9, and showed an apparent increase in settlement when surveyed on April 17, 1991 (up to 0.08 feet [about 1 inch]). A further survey of these points was made on April 25 and indicated elevations comparable with those recorded

893-6255

prior to the April 17 survey. It is concluded that the apparent settlement recorded on April 17 was the result of a surveying error. The absolute movements shown in Figures 3-2 through 3-13 are small, have no apparent pattern, and are in the range of survey closure errors. It is evident that the East Hide Pile is in settlement equilibrium and further monitoring is therefore not warranted.

Construction of the impermeable cover on the East Hide Pile will require removal of the present monitoring points. Because construction of the impermeable cover will increase the stresses within the pile, settlement monitoring will be performed during and after construction. Therefore, new settlement monitoring points will be installed at the start of construction.

#### 3.3 References

Golder Associates Inc., 1989. <u>Pre-Design Investigation Work Plan, Revision 1</u>, Industri-Plex Site, Woburn, MA, December.

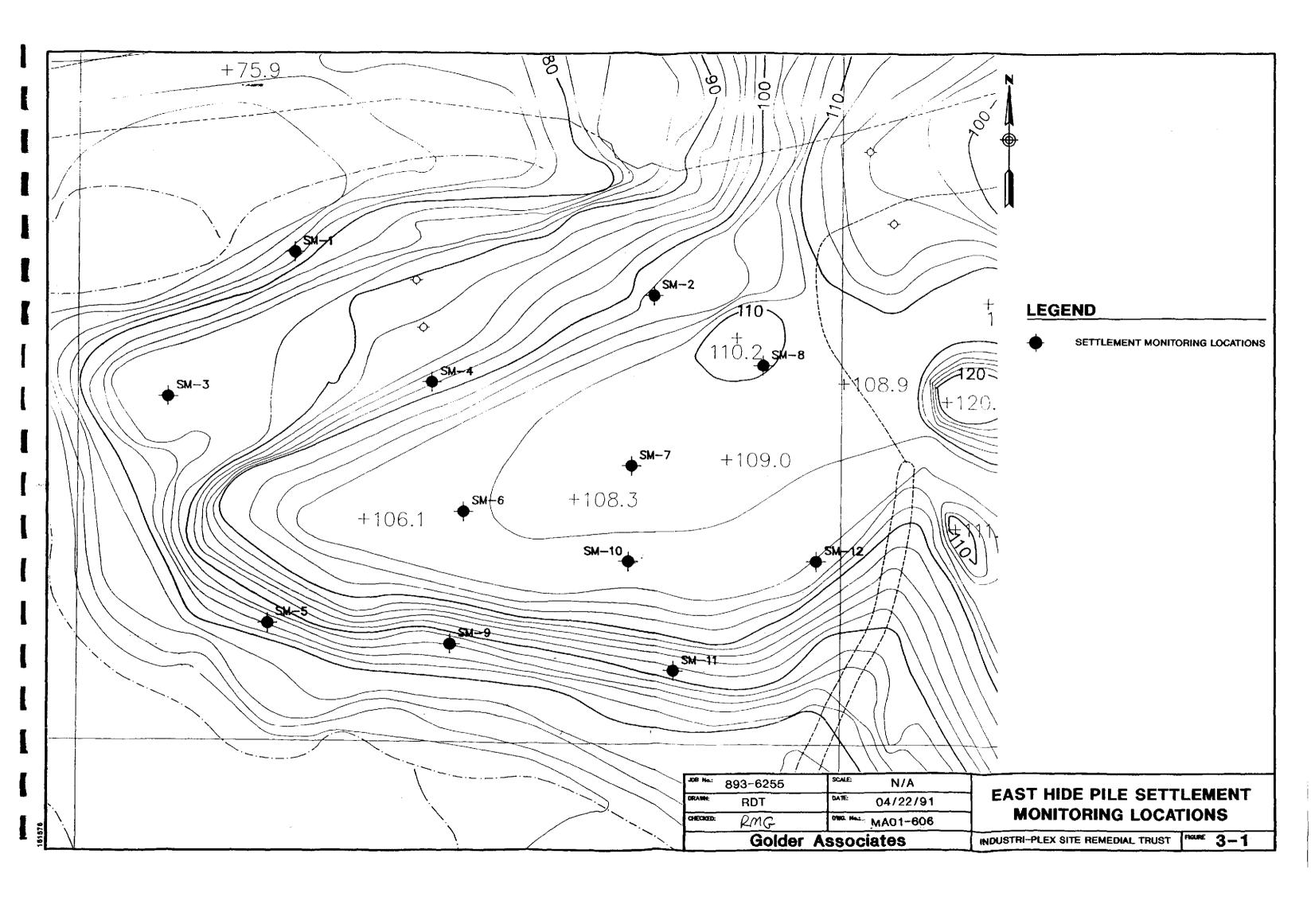
Table 3-1
East Hide Pile Settlement Monitoring Point Elevation Data

Month	SM-1	100	SM-2		SM-3		SM-4		SM-5	A at Augusta	SM-6	
	in eta eli Azota de la Azota de la	ELEVATION		ELEVATION		ELEVATION		ELEVATION		ELEVATION		ELEVATION
	ELEV.	CHANGE	ELEV.	CHANGE	ELEV.	CHANGE	ELEV.	CHANGE	ELEV.	CHANGE	ELEV.	CHANGE
May 1990	79.90	0.00	101.68	0.00	87.13	0.00	97.75	0.00	83.74	0.00	109.78	0.00
June 1990	79.93	+0.03	101.70	+0.02	87.16	+0.03	97.77	+0.02	83.77	+0.03	109.79	+0.01
July 1990	79.90	0.00	101.66	-0.02	87.13	0.00	97.73	-0.02	83.73	0.00	109.77	-0.01
August 1990	79.92	+0.02	101.70	+0.02	87.14	+0.01	97.76	+0.01	83.77	+0.03	109.79	+0.01
September 1990	79.92	+0.02	101.70	+0.02	87.15	+0.02	97.76	+0.01	83.76	+0.02	109.78	0.00
October 1990	79.92	+0.02	101.71	+0.03	87.16	+0.03	97.77	+0.02	83.75	+0.01	109.78	0.00
November 1990	79.91	+0.01	101.70	+0.02	87.15	+0.02	97.74	-0.01	83.76	+0.02	109.79	+0.01
December 1990	79.92	+0.02	101.70	+0.02	87.15	+0.02	97.77	+0.02	83.74	0.00	109.79	+0.01
January 1991	79.94	+0.04	101.72	+0.04	87.18	+0.05	97.78	+0.03	83.79	+0.05	109.80	+0.02
February 1991	79.90	0.00	101.70	+0.02	87.14	+0.01	97.74	-0.01	83.74	0.00	109.80	+0.02
March 1991	79.94	+0.04	101.70	+0.02	87.16	+0.03	97.75	0.00	83.76	+0.02	109.80	+0.02
April 17, 1991	79.92	+0.02	101.71	+0.03	87.14	+0.01	97.76	+0.01	83.74	0.00	109.76	-0.06*
April 25, 1991												-0.02
g st. Met.												
Month	SM-7		SM-8		SM-9		SM-10		SM-11		SM-12	
		ELEVATION		ELEVATION		ELEVATION		<b>ELEVATION</b>		ELEVATION		ELEVATION
	ELEV.	CHANGE	ELEV.	CHANGE	ELEV.	CHANGE	ELEV	CHANGE	ELEV.	CHANGE	ELEV	CHANGE
May 1990	109.96	0.00	110.64	0.00	85.78	0.00	108.19	0.00	90.32	0.00	107.86	0.00
June 1990	109.97	+0.01	110.64	0.00	85.81	+0.03	108.20		90.32	0.00	107.87	+0.01
July 1990	109.98	+0.02	110.64	0.00	85.78	0.00	108.19	0.00	90.30	-0.02	107.86	0.00
August 1990	109.98	+0.02	110.68	+0.04	85.80	+0.02	108.20	+0.01	90.34	+0.02	107.87	+0.01
September 1990	109.97	+0.01	110.64	0.00	85.80	+0.02	108.18	-0.01	90.32	0.00	107.86	0.00
October 1990	109.98	+0.02	110.66	+0.02	85.79	+0.01	108.19	0.00	90.32	0.00	107.88	+0.02
November 1990	109.98	+0.02	110.66	+0.02	85.80	+0.02	108.19	0.00	90.33	+0.01	107.86	0.00
December 1990	109.97	+0.01	110.65	+0.01	85.81	+0.03	108.18	-0.01	90.32	0.00	107.86	0.00
January 1991	110.00	+0.04	110.66	+0.02	85.81	+0.03	108.20	+0.01	90.33	+0.01	107.88	+0.02
February 1991	109.98	+0.02	110.66	+0.02	85.82	+0.04	108.17	-0.02	90.34	+0.02	107.86	0.00
March 1991	109.99	+0.03	110.66	+0.02	85.82	+0.04	108.18	-0.01	90.33	+0.01	107.87	+0.01
April 17, 1991	109.98	+0.02	110.64	0.00	85.79	-0.05*	108.16	-0.03	90.33	-0.08*	107.86	0.00
April 25, 1991						+0.01				+0.01		

NOTE: ELEVATIONS ARE GIVEN IN FEET ABOVE MEAN SEA LEVEL ELEVATION CHANGES ARE RELATIVE TO THE INITIAL MAY 1990 MEASUREMENT.

* PROBABLE SURVEY ERROR

REVISED 9/91 C:AUG91RPT:SMPTB3



In accordance with the RDAP, protocols and standard operating procedures for drilling, installation, development and testing of new monitoring wells will be submitted with the 95% Remedial Design Report.

## 4.1.3.3 Monitoring Parameters

Based on the results of the Pre-Design Investigation, and on design parameters presented in the 60% Remedial Design Report, the hydrogeologic monitoring data will involve water level elevation measurements.

The hydrochemical monitoring program will involve collection and analysis of groundwater samples. Routine hydrochemical testing during the initial monitoring period will include general water quality parameters and select TAL/TCL compounds. Once the hydrochemistry of groundwater extraction monitoring system has been established for the pre-operation phase and initial operational phase, the routine hydrochemical testing program can be reduced to sampling and testing of selected indicator parameters. The above monitoring program will be subject to modifications depending on the results of the periodic monitoring program review.

#### 4.1.3.4 Monitoring Schedule

A detailed monitoring schedule will be presented in the Operations and Maintenance Plan. It will be based on the design considerations for the groundwater extraction system. The preliminary monitoring schedule will be variable and require adjustments and modifications depending on the review of monitoring results.

Since monitoring data prior to and during the initial phase of groundwater extraction system operation is critical for establishing pre-operation (baseline) conditions, as well for the evaluation of its effectiveness, initial monitoring intervals will be more frequent; simultaneous evaluation of hydraulic and hydrochemical monitoring results will allow an assessment of the extraction system's performance and effectiveness. The monitoring interval period will be lengthened once subsequent monitoring results confirm previous readings and indicate that the extraction system is operating effectively and hydraulic parameters have reached a steady state.

The above monitoring schedule will be periodically reviewed and modified depending on monitoring results.

### 4.1.3.5 Monitoring Procedures

Detailed schedules and standard operating procedures for all aspects of the monitoring data collection program will be provided with the Operations and Maintenance Plan as part of the 95% Remedial Design Report. Specifically, the following aspects will be addressed:

- Piezometer Drilling and Installation Procedures;
- Collection of Field Parameters;
- Groundwater Sampling and Testing Equipment;
- 4. Groundwater Sampling and Testing Procedures;
- 5. Decontamination Equipment and Procedures;
- 6. Preservation and Shipment of Samples;
- Chain-of Custody Control;
- 8. Quality Control Procedures;
- 9. Monitor Well Maintenance and Inspection;
- 10. Sample Analytical Plans;
- 11. Laboratory Control Procedures; and,
- 12. Data Interpretation Procedures.

## 4.1.4 Monitoring Data Evaluation and Presentation

The data evaluation process will include reviews for data quality assurance and data quality control. Hydrogeologic data will be presented on maps showing up-to-date-water level contours. The hydrogeologic data will be used to evaluate the effectiveness of the hydraulic barrier in preventing off-site migration of Hazardous Substances.

Chemical data will be presented on tables and maps illustrating concentrations for the various chemical parameters tested. The chemical data, in combination with the hydrogeologic data, will be used to analyze changes to the plume geometry and to determine when approved performance standards have been met.

The monitoring data must be evaluated on a frequent basis during the initial stage of the operation of the groundwater extraction system. Initial monitoring results will provide the basis for modifications to the extraction system (such as changes to the pumping rates or well configurations) to ensure that the extraction system objectives are met.

## 4.2 Groundwater Treatment Monitoring System

The groundwater recovered from the extraction wells will be treated at the groundwater treatment plant before being reintroduced into the aquifer in the recharge basin. The selected groundwater treatment system consists of chemical oxidation with hydrogen peroxide, metals precipitation, air stripping/nitrification, arsenic coprecipitation, ozonation, and granular activated carbon (GAC) adsorption.

Monitoring requirements and procedures for groundwater treatment influent and effluent are part of the groundwater treatment design process. Monitoring details will be presented with the 95% Remedial Design Report.

#### 4.3 References

Golder Associates Inc., 1989. <u>Pre-Design Investigation</u> <u>Work Plan</u>, Revision 1, Industri-Plex Site, Woburn, MA, December.

Golder Associates Inc., 1990a. <u>30% Design Report</u>, Industri-Plex Site, Woburn, MA, September.

Golder Associates Inc., 1990b. <u>Pre-Design Investigation</u>
<u>Task GW-2</u>, <u>Hydrogeologic Characterization for the Extraction/Recharge System</u>, Interim Final Report, IndustriPlex Site, Woburn, MA, December.

Golder Associates Inc., 1991a. 60% Design Report, Industri-Plex Site, Woburn, MA, April.

Golder Associates Inc., 1991b. 30% Design Supplement Report, Industri-Plex Site, Woburn, MA, February.

Golder Associates Inc., 1991c. <u>Pre-Design Investigation</u>
<u>Task GW-1, Plume Delineation</u>, Interim Final Report,
Industri-Plex Site, Woburn, MA, January.